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Editorial Correspondence—VII.

BALTIMORE COUNTY, MD., May, 1858.

It was a pleasant drive of something over twenty miles that carried us from "Hayfields" to "Sudbrook," the residence of J. HOWARD MCHENRY, Esq, near Pikesville. Mr. Merriman, to whose kindness I was indebted for it, pointed out to me several places of interest as we passed them, at some of which we would have been happy to stop if time had allowed. Among these was "Hampton," the almost baronial seat of JOHN RIDGELEY, Esq.—in whose family the old Colonial custom of driving out on state occasions in "coach-and-four" is still retained. The grounds are admirably kept I was told, and all the belongings of the mansion and place, such as might be expected from wealth and taste and abundant care. Our drive carried us through Towsontown, the present seat of the Baltimore county buildings,—an attempt to divorce the business of the county from its real center in the city, to a village off the line of any railroad, which, however excellent in theory, I am inclined to think rather out-of-the-way and troublesome in practice; but trying it will best prove the merits of the case, and the location is probably as good a one for this purpose as could have well been chosen.

Numerous residences bordering upon the York turnpike, attest the increased development of an inclination among the wealthy to expend their time and money upon rural pursuits, and, we may add, increased attention among actual farmers who depend upon the soil mostly or wholly for their incomes, to those simple decorations of planting and gardening which add so greatly to the beauty and pleasure of a country home. The places of Messrs. Henry Turnbull, R. P. Brown, R. A. Taylor, Fred. Harrison, Jr., Jos. W. Patterson, Jas. M. Buchanan, U. S. Minister to Denmark, David M. Perine, J. H. T. Jerome, late Mayor, W. C. Wilson, Jos. Reynolds, Charles Pitts, W. F. Johnson and others, were passed on this part of our road, and we paused for a moment at the hospital residence of Col. WM. TAGART.

Sudbrook.

Before dinner we had time for a ramble here, just giving us a glimpse of the stock and fields. Mr. MCHENRY farms 800 acres, and is widely known for his connection with Jersey and Devon Cattle, in the breeding of which, together with other stock, he has for some time taken a deep interest. Having in 1852, procured from the late Roswell L. Colt, Esq., of New-Jersey, five Alderny cows and heifers, together with a bull from another party, but originally of the same stock, he made these the starting point of his present Jersey herd. In 1854 he bought of Mr. J. A. Taintor, two imported cows, "Commerce" and "Gazelle," and Mr. T. in addition, imported expressly for him the bull "Commodore" and three cows, (all with calf) "Faith," "Hope" and "Charity," portraits of some of which have already been given in these columns. With these and their descendants, Mr. McH. has now seventeen cows and heifers of pure Jersey blood—in order to establish his own herds never having as yet, with only one or two exceptions, disposed of a pure bred female of either Jersey or Devon blood.

His Devon herd was also commenced in 1852, its basis being two females from the Patterson stock, and a bull purchased the next season direct from GEORGE PATTERSON, Esq. In 1853 he also imported three heifers, Rose of Lancaster, (1366,) Belle of England, since dead, and not entered in the Herd Book, and Queen of Hearts, (1359,) all from the herd of Mr. John Bloomfield. In 1854, Mr. Taintor imported for him a prize heifer, Dahlia (623,) bought from Mr. Turner, the heifer Myrtle (909,) from Mr. Quartley, (both with calf,) and a bull also bought of Mr. Quartley, Red Rose, (290.) The same year Mr. McH. purchased the bull Uncas, (324) from Messrs. Wainwright of this state. He has now eleven females of this breed.

"Sudbrook" is cultivated mostly as a stock and dairy farm, and the butter, as might be expected, bears witness to the Jersey cream that enters largely into its composition. Its color is of that deep orange, and its taste is of that peculiar richness and sweetness,

which betrays at once the Jersey hue and flavor. Indeed I understood that Mr. Menry's samples of butter had been once or twice denied the premium at agricultural exhibitions, notwithstanding its evident superiority, from the belief that it was *artificially colored*—it being supposed that no cream was rich enough to produce it naturally. Mr. McHenry's dairy is one of the neatest and most convenient I have ever visited. The ice-house occupies a part of the same building—the dairy being partitioned off on two of its sides. The milk is kept upon a stone support or shelf of convenient height, hollowed ont to the depth of several inches to admit water around the pans, and faced above with imported tile of the purest white, giving it a neat and cool look that is exceedingly attractive.

At the stables, beside some other stock, we saw two fine imported *Percheron* mares—a breed worthy of wider notice. It derives its name from the district from which it comes, *Perche*, one of the old divisions in the west of France, and is a lighter and more active branch of the well-known heavy Norman horse. The prevailing color is a light or somewhat creamy gray. The breed has, I am told, become the most popular in France for use before the *diligences*—uniting sufficient spirit and alertness with great strength and endurance, to fit them well for dragging these heavy coaches, sometimes at considerable speed, and largely bred in their native district and disseminated for this purpose through the whole country. There was an importation of them some twenty years ago into New-Jersey, among them I am informed a horse called "Diligence," which is said to have been subsequently sold to go to the western part of New-York. This, so far as I am aware, is the only instance of their being brought into the country previous to 1853, when Col. CARROLL of Maryland, imported for himself the horse "Chartres," and two mares (besides a Norman mare,) and for Mr. McHenry the two mares we saw, "Lily" and "Snowdrop." The two latter have at different times been sent to "Chartres," but have unfortunately failed to breed to him, except in one instance, when the produce, a filly, lived but a few days. Each has raised a foal by a half Canadian horse of Mr. McHenry's, and he proposed sending them the present seasan to an imported Percheron stallion, "Duke of Normandy," now standing near Philadelphia, and owned by Mr. S. Holmes of Chester Springs, Pa.

Mr. McHenry has also a select flock of South-Downs, three ewes imported in 1856, four brought over last year, and the remaining four purchased of Mr. Thorne. Before leaving the stock, I may add that a few days previous to my visit, he had sold the Jersey bulls "Commodore," "Midshipman," and "Captain," together with several head of young stock, and one or two surplus males from his Devon herd.

I should not close this letter without noticing the greenhouses which nearly encircle Mr. McHenry's dwelling, and the statuary and paintings and library within—which, together with the broad fields and beautiful objects of animate and inanimate life without—supply every luxury of refinement, and sufficient employment for all one's mental activity.

I must conclude for the present, by adding that after dinner, in pursuance of Mr. McHENRY'S very kind offer, we took seats with him for a fifteen mile excursion, to visit the celebrated Devon herd of GEORGE PATTERSON, Esq., a gentleman who is, I might almost say, known for his connection with this breed wherever a sample of it has found its way on the western side of the Atlantic.

Curing Clover Hay.

EDS. CO. GENT.—In your issue of June 17, is an article on curing clover hay, by CALEB WINEGAR. I just wish to notice one thing in said article. He says that if the clover is dried without cocking—"if the leaves do fall off, they will not hurt the land." In this section of the country we cut clover to *feed* to stock in the winter; when wanted for *manure*, we plow it under *green*. Our time for cutting clover is when the first blossoms begin to turn brown; cut it and let it wilt; then rake and cock up in small cocks; let them stand from two to six days; turn the cocks wrong side up in the morning when the dew is on, thus dampening the outside and drying the inside. Draw it in in the afternoon. If cured right, it will be just a little damp. Sprinkle a little salt on each load when stowed away, and it will be heavy, bright hay, worth as much to feed as timothy hay and meal. When fed to cows and breeding ewes, their udders will be as much distended as on good pasture. Our lambs usually are dropped in March, and they have just as much milk as when the ewes are in the pastures, and are no more trouble. If it were not for clover hay cured in the manner described, we should lose at least one-half. D. A. A. N.

Earth-Mulch for Meadows,

"An astonishing effect," says THAER, "is often produced from earth being carried to the meadow and spread over it," and the same fact has, no doubt, been frequently observed. The remark reminded us at first glance, of Mr. DICKINSON'S practice of mulching his meadows with burned turf from the roadside, as well as with barn manures, and of his opinion of its highly beneficial effect upon the growth of grass, especially the former application.

The effect of this earth-mulch is most sensible when its character is appropriate to the soil; so Thaer advises sand for marshy meadows, clay and muck for sandy and loamy ones, but says that any kind of fertile soil will be found beneficial. The scrapings of yards and roads, the bottoms of ponds and ditches, burned clayey or loamy turf—all have a very sensible effect in improving meadows, "*because it gives to the herbage a disposition to put forth new roots and shoots, especially in the weaker tufts of grass, and thus strengthens and multiplies the plants.*"

POHL, in his *Annals of Agriculture*, published in Germany some fifty years ago, terms this mode of spreading fresh earth over the surface of meadows, "a renewing or making young again of meadow land." That such would be its effect we can very readily conceive, for it is well known that earthing any plant causes new roots to spring forth, and this is followed by new shoots, and should the earth applied be of a fertilizing nature, a considerable improvement would follow.

A manure-mulch would, no doubt, exert a greater effect, if care was taken that it did not smother and kill the grass; It should be fine or coarse—fine, well decomposed, and not in clods, that it would sink at once to the roots of the grass; or coarse and strawy, or

spongy, that the grass might readily find its way through it. We commend the subject to the attention of correspondents especially interested in grass culture.

Lightning Rods.

MESSRS. EDITORS—I am intending to erect lightning rods upon a 60 foot barn, and wish to ask a few questions. First, is it best to put a rod upon each end or to place them some distance from the extremity of the ridge? According to the directions in your Register for 1855, two rods, each placed 15 feet from the center of the ridge, and extending 8 feet above it, would be sufficient to protect the barn. But a gentleman who has had some experience in these matters, says that barns are generally struck upon the extremity of the ridge, and he thinks it best to put the rods there. I remember a certain old Doctor who used to say that the gases which are constantly rising from new hay, and passing out of the windows in the gable ends, possess a strong attraction for the electric fluid, and he said the windows ought to be kept closed during thunder showers. Now if this be so, it seems to me that it will be best for me to place my rods upon each end of the barn, and have them rise above it some 15 feet; but will it not be difficult to stay the rods so that the upper part will keep in place. Can you tell me the cost per foot of such a rod as is recommended in the Register. OLD SUBSCRIBER. *Fitchburg, Mass.*

The small amount of effluvium arising from new hay could have very little effect in attracting the electric fluid, and we should not go out of the way to guard against this difficulty. Lightning is more apt to strike the ends of the barn, because the ends present *sharp corners.* But rods high enough above would entirely shield them. As rods 8 feet high and 15 feet from each end would however require to be *bent over* the roof, and consequently be more difficult to stiffen firmly, we would recommend 15 feet points at the ends as proposed. They may be easily made stiff against the wind as follows:—Procure four pieces or rods of iron of about four or five feet in length each, varying gradually from an inch in diameter down to half an inch or less; weld these together so as to give a gradual taper. By being thus larger towards the roof and smaller up towards the point, the rod will stand firmly.

We cannot give the precise cost of the rod, but think about a dollar per 10 feet, including welding, points, and erection. If our correspondent will weigh a rod of iron, and multiply the weight by the price, he may easily learn the cost of the iron; then add a dollar for blacksmith work, and another dollar for digging the hole and erecting, and he will be within bounds.

Letter from John Johnston.

NEAR GENEVA, 19th June, 1858.

MESSRS. EDITORS—I wrote you last autumn, telling you that I had manured a small piece of land for wheat, that never had been manured, and left about the same quantity in its natural state. If every wheat grower in the state could only see it now, they would need nothing more to convince them that manure is or soon will be the staff of life. The manured piece was in ear all of six days before the unmanured piece, and stands at least two-thirds more on the ground. But that is not all; the manured piece must nearly escape the midge, while the other piece must be all destroyed. I take every opportunity to let farmers and others see the difference—but far more ought to see it, as I believe it would do more good than all the writing that can be done.

Winter wheat does not require heavy manuring. No grain requires less manure, or more judgment not to over do it.

I hope we shall hear something about the result of surface manuring this fall, as I know a number tried it last fall; but working farmers seldom write for publication, and I put but little faith in the statements of those who don't see to everything themselves. This everlasting twaddle about agricultural chemistry is of no use to farmers. What is wanted is high feeding of the domestic animals, and common sense, and every thing else would go much better. Draining is going on in this section as fast as four tile works can turn out tile. If we had four more in this neighborhood, they would get all the orders they could supply. If tile works are put up any where, there will be a demand for them now.

If farmers could all see the necessity of higher feeding—of course making much better and larger quantities of manure, they would then be on the road for prosperity. I trust they wont be so long in seeing the need of manuring as they were of the great need of draining, which has got such a start now that no more need be written on the subject, unless some cheaper way can be invented than digging the drains by manual labor. JOHN JOHNSTON.

Hay-Making.

MESSRS. EDITORS—I notice an article in your valua ble journal, headed "Early Cutting of Hay," by J. H. H., Seneca Co. He says:—"I have observed in several agricultural papers, articles enjoining farmers to cut their hay as early as at the time it comes out in blossom, because, it is said, if properly cured, the hay keeps its beautiful green color, and the nutritive juices of the plant, to a much greater degree than if suffered to stand until the seeds are fully formed." He says, further, that this may be true in regard to clover, but he is satisfied that it is not in regard to timothy or the other grasses. Permit me to say, Messrs. Editors, that agriculture has been my vocation for upwards of half a century, or from my boyhood, and I esteem it my prerogative to have at least some experimental knowledge of the whys and wherefores of some things. And now with respect to the right time, and vice versa, the wrong time to cut hay. The right time is when the grass is fully developed; if cut at an earlier period it will be found to contain so much water that the reduction in drying will much disappoint the owner. It must not be allowed to stand until its seeds are completely formed, much less ripe. All plants in arriving at maturity, have their starch and sugar and gum in large quantities converted into woody fibre; and as sugar, gum and starch are almost the only nutritive elements, it is highly necessary and desirable that these should be preserved; and the point of successful grass cutting is that between the full development of the plant and before the full formation of the seed; or in other words, when most of the blossoms appear. Grass should never be left to be cut after harvest; if it is, it becomes woody, and therefore unpalatable to all animals, whether ruminating or otherwise. I have

a horse that will make a very graceful bow when I put before him a lock of early cut hay. It is true, it was cured or dried as it should be. I presume the only difficulty in regard to the early cut hay of friend J. H. H., was that the stalks of the plants were not dried perfectly. For my own part, I feel justified in asserting that one ton of timothy hay, cut and secured at the proper time as it should be, is worth two cut after harvest. P. W. T. *Orient, Suffolk Co., N. Y.*

Golden Spangled Chittagong.

Ever since the first introduction of the Cochin China fowl, which originally attracted attention from having been patronized in the Royal poultry-yard, by Queen Victoria, and by being figured in the Illustrated News, it has advanced so rapidly in public estimation, that many importations of fowls have been made from India, China, and elsewhere, that are much superior in size, and in their general domestic habits to the common fowls of the country. Among the Asiatic fowls, the Shanghais have occupied, heretofore, a prominent position; not however as *the best* among us, as many have contended, but as a fowl in many respects superior to our common breed.

Some two years ago, while on a visit at Rochester, we found in possession of the late David Ely, a small lot of Asiatic fowls, which appeared to us as being far superior to any other of the large breeds. On inquiring their origin, Mr. Ely informed us that he obtained them through a friend in New-York, from the master of a vessel direct from China, and that they were called *Pheasant-colored Chittegongs.* He had breed them two years, and found them valuable as early layers and good mothers. He had at the time we first saw them, in his yard, nine pullets and one cock, and the ten he assured us weighed over 90 pounds. They were as much alike "as two peas"—all seemed to have been cast in the same mould, both in form and color.

On leaving Rochester, a year ago last March, we obtained two clutches of eggs from Mr. Ely, and notwithstanding they were carefully packed in a basket, and carried most of the way in the hand, only five chicks were hatched, one of which was killed by accident, leaving us four, two of which proved pullets, and two cockerils. As they have no resemblance in form or color to a pheasant, we drop the *pheasant* and substitute the *Golden Spangled* Chittagong, as being more oppropriate.

However, "utility should precede beauty," and in the estimation of many, "handsome is, that handsome does,"—and here we think the Golden Spangled Chittagong fowl will not be found wanting. They are excellent layers, and arrive at maturity earlier than any other larged sized fowl we know. By the term "maturity," is meant the age at which the pullets commence laying eggs, and thus perpetuate its race. We think them preferable to most of the other Asiatic fowls, for the reason that they have clean, yellow, medium sized legs, better feathered, very uniform in color and markings; their red combs and wattles, contrasted with their yellow bills and rich plumage, give them quite a pretty appearance.

"We praise the bridge that bears us safe over," and by the same rule we must praise the Spangled Chittagong fowl, because after trying several sorts of the Asiatic fowls, we find them *equal* if not *the best* of any which we have had the opportunity of trying the same length of time.

The peculiar beauty of the Spangled Chittagong fowl, is certainly in their rich plumage, which renders them objects of attraction and interest to the most casual observer. For beauty of plumage, they surpass all other kinds of large fowls. Their general appearance has much of the Cochin China character. They are extremely docile and tame in their habits, and a three-foot fence is sufficient to restrain them within prescribed boundaries, on which account we most assuredly believe them one of the best breeds for the poor man and the farmer, considering them, as we do, not as *fancy*, but only of productive stock.

The figure of both cock and hen, as represented in the cut at the head of this article, with some exceptions, are very correct portraits. The crow of the cock, instead of being a clear, ringing, clarion tone, like the Game or Hamburg bird, heartily delivered, as if in defiance of every rival, like the blast of a bugle, is short, hoarse, and monotonous, more like a croak than a crow. C. N. BEMENT. *Springside, Po'keepsie.*

Cure for Scours in Colts.

MESSRS EDITORS—Having a young colt taken with the scours, and after having tried every thing for several weeks, that I could hear of, I was induced to try the following remedy:—

Boil smart-weed in water enough to make a strong tea, and give your colt a half-pint in two quarts of scalded milk, twice a day. It may be well to give the mare a table-spoonful of sulphur every other morning, for a week or ten days, if you think she is out of condition. In the case of my colt the above was a sure remedy. S. L. WARNER. *Lanesville, Conn.*

FATTENING SPRING CHICKENS.—Feed them, says the *Irish Farmers' Gazette*, on ground rice, well boiled, mixed with barley or oat-meal, moistened with milk, and keep the coops and troughs scrupulously clean, and clean straw under the chickens. They may also get a little bruised oats daily.

FLAT FEET.—Can the feet of horses that are *flat* be improved, and how? How can they be shod to make them serviceable on the road? Will some one, wise in horse-foot-ology, give an early reply? E. R. B.

Composts—Muck and Ashes.

A few weeks since we put the question: "Got any ashes?" to our readers, and suggested some of the benefits following their use as a direct application to the soil. Now, if they "have any muck," we would remind them of one of the forms of compost into which it may profitably enter. We take up this variety of muck compost, first, rather than that of muck and barn manure or other material, as on the whole, more seasonable at present.

Muck, we remarked, only needs further decomposition by fermentation to convert it into a valuable manure, equal, according to DANA, to cow dung. Any alkali will do this, and ashes answer well the purpose The Editor of the *New-England Farmer*, Mr. BROWN, in his valuable essay on swamp muck for the Patent Office Report, says: "Next to a compost of muck and barn-manures, a mixture of muck and ashes is the most common, and by experienced persons is considered the most profitable. It is certainly one of the most convenient. * * The farmer * * where ashes are applied, finds his plants vigorous, of a fine healthy color, growing permanently throughout the season, producing highly perfected and abundant crops; so that their value *to be used with muck*, is often estimated as high as fifty cents a bushel."

Another writer says: "To bring out the ammonia, the muck must be fermented, which may be effected by the use of alkalies. From fifteen to twenty bushels of ashes, or ninety pounds of potash, are required to a ton of peat. Such a compost will contain about the same amount of ammonia as cow dung. * * A farmer in Watertown, sells his cattle manure, and mixes the leached ashes from his soap and candle factory with muck, one part of the former to three of the latter, and thus keeps his farm in a high state of cultivation."

As to the quantity of ashes required for composting a cord of muck, no exact rule can be given, for some specimens will possess greater acidity than others, from less perfect decomposition, the character of the vegetation of which it is composed, or other varying causes. Experiment, however, will furnish a ready test of this question. Enough to induce fermentation is all that is required. Five bushels of ashes to a cord of muck, has been found sufficient; they should first be placed in layers and afterwards completely intermingled by shoveling over at intervals. Twelve to fifteen loads per acre, will furnish a sufficient dressing for one season, though on soils lacking in vegetable matter, it should be repeated for several years.

Many experiments have shown the value of this form of compost, and we scarce need farther to urge it upon our readers. To the many in all sections of the country, who *can have muck for the digging* on their own farms, and whose daily fires supply ashes in considerable quantity, it would seem to be a most convenient and profitable method of increasing the stock of manure, and the consequent productiveness of their soils. It is well, if the muck is of a particularly *raw* character, to dry it for some time before composting, allowing it to be exposed to the air and frost over winter, but with many kinds this is not essentially necessary. In conclusion we would recommend a trial of composts of this character, as a top dressing for dry grass lands, to be applied early in the fall. Finely pulverized, as it should be, it will at once go to "the root of the matter," and prove no offence, either to grazing animals or the scythe and rake in after years.

Wheat Growing in Western New-York.

MESSRS. TUCKER—I promised to write you when I could write with certainty about the midge. The Mediterranean wheat in this neighborhood I understand is comparatively free of it, but the white wheat on all late soils is about ruined. I have heard from Livingston and Monroe counties, and they say the wheat is almost a total failure there. Ontario county ditto.

Livingston county is I think one of the best, if not the best, wheat county in the State; but in none of those counties west of us, has it entered into the hearts or heads of the farmers, that cattle and sheep manure is the one thing needful to raise either grass or grain, and until they become fully converted to that, and also to higher feeding of their stock and making rich manure, their prosperity as farmers is at an end. Seneca county begins to move a little in the right direction, and as they are now drained to a considerable extent, they will more and more see the necessity of more and stronger food for the land; but I fear that it will be only on the earliest and best manured lands that we can raise white wheat, and Mediterranean will not stand up on land properly farmed.

With regard to my own wheat, I think the midge has done me no more damage than it did two years ago when I had a good crop, (you can probably refer to it.) My salted wheat is but little hurt with midge; only the low and late heads are damaged, and the small spot I wrote you I manured for the first time has *scarcely* a midge in it; the spot adjoining, that was never manured, is nearly ruined; they were both salted. I give every farmer that I meet with, a chance to examine these two spots. I salted a strip through another field. I noticed it was all of three days sooner in ear, and of course will be less hurt by midge. My other fields, part of which were not so recently manured, are more hurt by midge. Many passers-by who go over the fence into my 14 acre salted wheat, come out and say "you have no midge," but they don't look at the low, later heads. Both salt and manure have helped that field, and the tillage in fallow was very good; still I won't have a yield equal to 1856. The heads are fully as long, but are deficient in the sets, *cross ways* of the ear; but even manure on some softer soils will not protect it from the midge. A neighbor, whose land is drained perfectly and who manured highly, but whose land is naturally a little later, (a few days only,) and I think rather highly manured, is very much hurt by the midge.

I think it is only on gravelly or early soils, that white wheat can be raised in these times. Livingston county could do it if their land was fed as it ought to be.

People say I have 20 acres of the best looking barley ever seen. It will be the first time I ever had an extra crop of that grain. If it turns out large, I will let you hear of it, and also of my new plan of raising it. My corn and oats are also good. I don't think clover or grain quite as good as last year. JOHN JOHNSTON. *June* 29.

P. S. Since writing, I have examined my fartherest east field, and find almost all destroyed by midge. It is as good a wheatfield as any I have got, but has been too hard pushed with wheat. It must have food and rest. Two years ago it brought a fine crop, being the 6th since it was manured, which shows this crop was one too many. I will feed it without fail.

ENTOMOLOGY—NO. 16.

Experiments—Soap on Apple Trees—Powdered Charcoal on Cucumber Plants.

EDITORS COUNTRY GENTLEMAN—The worm on currant and gooseberry bushes which "Enquirer," of Ilion, N. Y., so accurately describes, is the larva of the American currant moth, (*Abraxas? Riberia,*) a full description and figure of which, in its different stages, will be found in the Transactions of the New-York State Agricultural Society for 1847, page 461, and some additional particulars are given in the volume for 1856, p. 427. I have nothing to add to what is contained in these accounts. I have known quite a variety of remedies tried for expelling these worms from the bushes, but none of them were of the slightest service. The insect is quite analogous to the European gooseberry moth, (*Abraxas Grossulaviata,*) and in England the experience of ages has shown that, though tedious, the only sure and effectual process by which the bushes can be rid of these worms, is to shake and pinch them off by hand, and crush them beneath the feet.

I know not what the larger reddish worm is, which "Enquirer" speaks of as living together in clusters, and wholly stripping the branch they inhabit. The Red-humped prominent, mentioned in Trans. State Ag. Soc. for 1856, page 342, corresponds with the little that is stated of this worm; but I have never known this to attack currant bushes, or to appear so early as this in the season.

I have wanted very much to draw up an article for the Country Gentleman upon the Apple tree borer (*Saperda bivittata,*) but other engagements are so pressing upon me, that I shall be unable to do so for a few weeks to come. I therefore avail myself of this opportunity to say to your readers, briefly and in haste, but most earnestly,

Nota Bene!

If you have any young apple trees, and have not yet rubbed their bark with soap this season, do so immediately, without fail!

In my article in the Country Gentleman, January, 1857, (vol ix p. 78,) the statement of Mr. J. M. CLARK of Baraboo, Wisconsin, was published—that he had taken thirty large sized Buprestis worms from a choice apple tree, which had been regularly washed with soap, sulphur and tobacco water, in May or June, for three years preceding. This statement excited doubts in my mind whether soap was, after all, so effectual in protecting trees from borers, in the bark and wood, as all previous testimony had induced me to believe, and I resolved to say nothing more respecting the efficacy of this substance, until I could test it, and thus be able to speak from my own observation and knowledge. I accordingly entered upon an experiment, last year, with this view. I have thirty young apple trees between three and four inches in diameter, planted in six rows. The borer had the year before invaded most of these trees, and was still lurking undiscovered in several of them as I since find. On the 20th of June I rubbed the bark of the four outer rows of these trees, profusely, with common soft soap, and omitted applying it to the two middle rows. I have just completed a careful inspection of these trees. The unsoaped ones are eight in number. In four of these no young grubs were found; two of them having been so nearly girdled by mice two or three winters ago, that there was scarcely sufficient bark remaining to furnish an abode for a borer. Of the four remaining trees, three had two young grubs in each; the fourth was last summer the thriftiest tree in the whole orchard, but this spring, to my surprise, only two of its limbs put forth any leaves, and on coming to examine the butt, small borers from less than a quarter to nearly a half inch in length were detected and cut out of the bark, to the number of *fifteen!* I also have four other young trees, standing apart from those above spoken of, and as a farther experiment, I wrapped and tied tough, thick brown paper around the butt of these, without applying soap to them.

This spring the lower edge of the paper where it was in contact with the ground, was found rotted away so as to slightly expose the bark at the surface of the ground, and in one of these trees three small borers were found. Thus in twelve trees which were not soaped, twenty-four borers had been deposited during the past year. And of the twenty-two trees to which soap was applied, a most careful scrutiny has failed to detect a single young borer in any one of them. The experiment therefore demonstrated as conclusively as any single experiment can do, that this substance is a perfect safeguard against the borer, the most insidious and deadly enemy with which we have to contend in our orchards. Some of the trees still show the white salt-like tinge of the soap applied to them a year ago, which satisfies me that a single application will suffice to protect the tree for the whole year. Moreover, the clean, smooth, bright appearance of the bark of the soaped trees is in marked contrast with the rough, scaly, moss-covered bark of the unsoaped ones, showing that the health and vigor which this substance imparts to the tree, demands and will abundantly repay for its application where no insect depredators are present in the vicinity to be repelled by it.

A single experiment, however, can seldom be relied upon as fully establishing any point of this kind. An instance forcibly illustrating this is now fresh in my view. An article is now going the rounds of the papers, copied from one of our most respectable agricultural periodicals, in which the editor, *ex cathedra*, assures his readers that pulverized charcoal dusted over cucumber plants will effectually repel the striped yellow beetle from them. On this subject he is positive, from actual trial. About a week since, I discovered that my cucumber, squash and citron plants were overrun, eaten, and in a fair way to be soon destroyed by this very insect. I immediately dusted three of the hills profusely with charcoal, turning up the leaves of one hill, and coating their wounded and bleeding under sides with the powder. Three other hills I dusted with pulverized soot, and three others I enclosed in boxes open at the bottom and top, whilst others still were left wholly unguarded. On visiting the plants next day, these beetles were found upon them as numerous as before, and distributed equally upon the dusted and undusted hills, some of them black with the coal dust, like a hog that had been wallowing in the mire. With my fingers I now crushed every insect that was not so nimble as to escape. And by following up this practice daily since, they have left the vines, so that only a few stragglers are now to be found, and these continue to occur as often on the dusted hills as elsewhere. I have now prepared boxes for nearly all the hills, having found a beetle inside of these boxes in only a

single instance. The experience of many years has shown me that these open boxes placed around cucumbers, melons, squashes, and all kindred plants, are an effectual protection against the cut-worm, the striped beetle, the large, stinking squash bug, and all other insect depredators.

I hope ere long to be sufficiently at leisure to resume the series of Entomological contributions to the Country Gentleman, which other engagements have compelled me to intermit for some time past. ASA FITCH. *June* 28, 1858.

Improvement of Pastures.

As the subject of the grasses and its importance has been frequently treated of in many of the agricultural journals, a recurrence to it at any time it is hoped will lead the agriculturist to study his best interest. Our pasture grounds need greater attention than is generally paid them, to make them productive in quantity and quality, of the grasses for the grazing herd. Next to the having good stock, is that of providing good pasturing. All lands are not adapted to this purpose. There is a vast difference in the quality of the grasses, and we consequently find that some pastures in which there is a luxuriant and well sustained crop of herbage the season through, the animals are famished and lean that are fed upon them. Other lands devoted to their use, while they appear short and dry, turn out their tenants in the fall in a condition obviously improved—they are fat, sleek, and show no signs of a lack of food, but the reverse. Low lands, which are generally saturated with water which becomes stagnant, seldom produce any but aquatic grasses, and can never be rendered good for pasture without draining. Although they produce an abundance of green, and apparently succulent herbage, the animals are invariably poor, afford but little milk, and come to the barn in autumn lean and enfeebled. High grounds, although they are more liable to be seriously affected by drought, have the advantage of producing a more nutritious quality of food; the grasses are short, sweet, and highly nutritive, and animals pastured upon them gain rapidly in flesh, and produce not only a larger quantity of milk, but that of a superior quality. Yet the best pasture lands, like the grass and cultivated soils, in general, will nevertheless, in time become sterile; the more valuable kinds of grass will "run out," and be supplanted by others of a less desirable kind or entirely worthless class. Nature, in this, seems to corroborate the importance of a rotary system of cultivation, with respect to all the more valuable productions. After producing a certain class of plants, for a stated or definite period, the soil appears to weary of it and to demand a change. We see in our forests, that the oak succeeds the pine and the pine the oak. So the minor productions. Corn cannot be cultivated with success on the same soil, more than three years in succession at most. Wheat never succeeds more than two, and clover and the other cultivated grasses deteriorate after yielding a few crops, and finally depreciate and disappear. By breaking up our pasture grounds, occasionally, applying manures and plaster, and stocking down with fresh seed, we should find the soi would be vastly benefitted and improved.

Where the surface is such as not to favor this kind of amelioration, the use of plaster, ashes, lime, and other similar fertilizers, is of great benefit. I have seen poudrette, guano, bone-dust, &c., used with good success, especially on sandy soils for pasture. But as to guano, I cannot recommend it for this purpose, at the present high price.

My plan for the last named soil, is to turn under a good crop of grass in August or September, and sow half a bushel of timothy, and red and white clover equally mixed, and apply three bushels of plaster to the acre as early as the first to the tenth of Sept., and keep off the cattle until the middle of the ensuing May; this is all that will be needed for several years, until the grass plants begin to fail, then they may be manured with good barn-yard manure as a top-dressing in the fall, and sow three or four bushels of plaster in the spring, and you will find the results all that is desirable.

Another thing, very desirable and important to having good pastures, is to know the quality of the soil and its chemical constituents, and then the kind of grasses that will produce the most nutrition to the animals to be fed, whether for milk or flesh; for the great and fundamental doctrine from whence all our reasoning on the subject of animal nutrition, is the identity or almost identity, of the principle of vegetable and animal body. The conclusion founded upon this identity is, that with slight modifications, the vegetable principles are assimilated by the animal frame—the albuminous being converted into flesh and muscle, the oily ingredients into fat, and the mineral salts into bone and other solid parts. In the dairy, next to a *good* cow, is the importance of *good food* to the production of a *good article* of butter or cheese. Many dairymen are disappointed in not having a good article, and frequently lay the blame to the dairymaid, when the real truth is, the fault is in not providing good feed and pure water for the cows. G. T.

Side-hill Plow on Level Ground.

MESSRS. TUCKER & SON—In answer to "J. H." in Co. Gent. of June 10, as to side-hill plows, I would say that two years ago I purchased a side-hill plow. I have now used it two seasons, and have come to the conclusion that if I owned a level prairie farm even, I would have no other plow on the premises. I like it everywhere; and I will tell you my reasons, so that you can judge for yourself.

1st. You can plow a piece of ground quicker with a side-hill plow than you can to go around it with a common plow, because the furrows are all long.

2d. It saves making "dead" furrows and ridges. I usually turn the furrow one way one year and the other way the next year, unless the land is very steep.

3d. It saves turning on and treading down what is plowed, as we are obliged to when we go around the "land."

4th. We find we can plow around stumps and stones, and up to fences better with a side-hill plow than with a common plow.

I know side-hill plows are a *little* heavier than common ones, and it is some more work to learn both oxen to go in the furrow. The plow I have used turns sward-land as well as I could wish, where it is level—as well as common plows, I think. It is about heavy enough for one pair of oxen to break up with, but a lighter one would be better for "old land." E. GRAVES, JR. *Ashfield, Mass.*

Roaring in Horses.

Having bought a valuable work-horse last winter, I find that his wind is somewhat affected; when he becomes fatigued he breathes very loud. I can only compare the sound of his breathing to the escape pipe of a steam mill, which it resembles some in sound. Please inform me through the Cultivator what ails him and what to do for him. H. G. *Illinois.*

This is probably a modification of the disease commonly termed *roaring*. It is produced by various causes, and assumes different characteristics. It may result from catarrh, influenza, or bronchitis; from local injury; by a thickening of the membranes lining the breathing organs; from tumors; and from other causes. Its symptoms will be variously modified by different influences. If we are correctly informed, it usually is hard to cure; the treatment depends on the cause; and the knowledge of this requires a more thorough acquaintance with the circumstances of the case than is stated above. Dr. Dadd remarks:

The intelligent reader will here perceive, that in the majority of cases very little hopes can be entertained of a cure, and in fact the defect cannot be cured unless we can remove the exciting cause; and that, in cases of distortion, hepatization, &c., is beyond our art. If the difficulty be at all removable, we know of no better way to accomplish it than by improving the general health of the subject, in the use of proper diet, expectorants, and relaxants; by steaming the nasal passages, &c. If it arise from atrophy of the muscles, let them be stimulated daily with hartshorn liniment, or some such application, and frequent hand rubbing. If from tumors, let them be removed. If the thyroid glands are enlarged, they should be rubbed daily with stimulating liniment, or ointment of iodine. The horse should at all times have the free use of his head and neck, or the best treatment might fail. Should the cause of roaring evidently exist (below the fauces) either in the bronchii, trachea, or lungs, the operation of tracheotomy may be preferred, which consists in making an opening into the trachea, and through it inserting a tube, which may be worn for any length of time, by taking the precaution to cleanse it occasionally.

Larvæ on Plum Trees.

Can you, or any of your subscribers, give a remedy for the extermination of small caterpillers, which prevail in great numbers upon plum trees in this vicinity; do they emanate from the curculio, or is it a new difficulty which the unfortunate plum tree is subjected to, and if so, by what means can they be eradicated?

They somewhat resemble the disagreeable worms which a few years ago appeared in great numbers upon the Linden trees in various parts of the country, hanging down from their webs upon the heads of persons passing under them. As they grow to greater size upon the plum trees, they must prove an obstinate enemy. Can they be killed by fumigating, or showering with some liquid, which in killing them will not injure the tree. J. H. C. *Valley Falls, R. I.*

They cannot be allied to the curculio, for that is old, and these appear to be new—besides the larvæ of the curculio do not infest trees and dangle on threads, but live within the body of the fruit. As we are furnished with no description of these caterpillers, we cannot in any case say what they are—and even if we had them before us, we should probably be unable to recognize them, as there are a vast number of kinds of the geometer caterpillars (Harris knew seventy-eight) of which these are probably one. No fumigation could be well given them on so large a scale, strong enough to destroy them. If coal tar (gas tar) could be applied to them in some wholesale manner, without touching the tree, it would no doubt prove effectual, as it is peculiarly destructive to such insects, but it would perhaps be impossible to apply it.

Good Cultivation—the Small Fruits.

We were much interested during a recent visit to the grounds of J. S. GOULD, of Macedon, N Y., with the rapid progress he has made in the cultivation of the smaller fruits during the two years he has occupied his present farm. His success in farm management for the very short period since he has relinquished the manufacture of rail cars in Albany, and assumed rural pursuits, should incite the emulation of the many who have had less success, although occupied with the cultivation of the soil all their lives.

In order to produce *immediate* results, he has given his attention largely to the culture of strawberries, raspberries and blackberries. He has eighteen hundred stools of the Fastolff, Franconia, Knevett's giant, and Red Antwerp raspberries, which are now setting heavy crops of fruit. He finds these sorts nearly equal as to productiveness. The Dorchester and New-Rochelle blackberries both prove good bearers; the former is preferred for its flavor, and the latter for its size and great bearing. Although but a few weeks since the first leaves appeared, some of the new shoots of the Rochelle blackberry already measure over six feet. A new seedling of the common black raspberry or Black cap, is bearing this year for the first time. It possesses great vigor of growth, and covers the face of a trellis five feet high and fifteen feet long. Last year, its longest shoot was twelve feet. It is now loaded with forming berries.

Wilson's Albany is his favorite strawberry. We found many of the berries to measure an inch and a third *in diameter*. New plantations of this variety, made about six or seven weeks before, bore as large crops as many other sorts the second year, and many of the berries, now ripe, measured an inch in diameter.

His cultivation of both raspberries and strawberries, is performed chiefly by a horse, and the surface has been kept constantly mellow. We think it scarcely possible that the mellowing process could be repeated often enough by hand labor. He has not manured his grounds, and only plowed them to a good depth. With such success, he is (of course) a constant reader of the COUNTRY GENTLEMAN.

Drying Peaches without Peeling.

A correspondent of the *Louisville Journal* communicates a new plan of drying peaches, which may be of service to our readers. The *furze* is removed by immersing in lye, made by boiling wood-ashes in water, to a tolerable strength. The lye should be warm, but not so as to cook the peaches, which are rubbed in it awhile, and then washed in clear cold water. Every particle of furze will be removed, and only a thin skin remain—they can then be cut and dried in the usual manner. They thus lose nothing of their sweetness by peeling, and are said to be of the best quality for all cooking purposes.

Editorial Correspondence—VIII.

BALTIMORE Co., Md., May, 1858.

Springfield,

The residence of GEORGE PATTERSON, Esq., in Carroll county, contains 1,759 acres. About 700 are in cultivation. In the improvement of his estate, Mr. Patterson casually mentioned that he had applied 240,000 bushels of lime at a cost of over $50,000. He said that as a farmer, he "believed in lime, grass, and dung," and we had evidence that it was a creed not of words merely, but of actions. For many years Mr. P. has devoted himself closely to his agricultural operations, and has been a minute observer as well as a careful and thorough practitioner.

The first thing to spring up after the application of lime, he had noticed to be mulleins; then comes the white clover, and lastly, what he considers undoubtedly the same grass as the Kentucky blue grass, *Poa pratensis*. In speaking of grasses, Mr. P. mentioned TIMOTHY HANSON of Baltimore, who first introduced that kind known so widely by his christian name, and which also bears in some parts of the country the sirname of one Herd, who is said to have discovered it growing wild.

The rotation on which Mr. Patterson has decided, is one of nine years, viz: clover for two years, wheat one year, timothy mowed for hay two years, and then pastured for two years more, and lastly one crop of corn. Timothy and orchard grass he compared thus: the former will make twice the hay, but the latter gives more pasture. Timothy he cuts just as the head is forming. To cure clover hay properly, it must retain the color of flower and leaf perfectly, and Mr. Patterson recommends this as the cheapest and simplest mode: he lets it lie in the swath about six hours, then turns and gives the lower side half an hour to dry in, puts up in small cocks and takes in the next day.

His treatment of the corn crop may be interesting. The timothy sod having been turned in, in the fall, as deeply as possible, say by plowing 9 or 10 inches, the field is thoroughly harrowed three times in spring, and laid off by the plow three and a half feet by four. The corn is dropped in, in the rows laid off by the first plowing, and is covered by the harrow. There is thus no furrow left for the water to tear out the seed or young plants.

The Patterson Devons.

But Mr. PATTERSON'S Devons are the main feature of the place. The herd is descended from six heifers and a bull presented to a brother of the present owner by Mr. Coke of Holkham, England, who afterwards became Earl of Leicester—a man whose fondness for fine trees is as noted as that he manifested for superior stock—it being related of him that he planted 1,800 acres in wood, and lived to sail in a yacht made from timber of his own planting. In order to change the blood when necessary, Mr. Patterson has imported five bulls during the 22 years since the stock first came into his hands—the bull Anchises, (140) bought from the Earl of Leicester (who stated that he had purchased him for his own use from one of the best herds in Devonshire,) and imported in 1836; Eclipse, (191) calved in 1839, and imported from Mr. Bloomfield of Warham, Norfolk, England; Herod, (214) calved in 1844, and imported from the same herd in 1846; Norfolk, (266) calved in 1851, and imported from the same herd the succeeding year; and Chatsfield, (to be entered in next vol. Herd Book,) now three years old, imported two years after from the Quartly stock, and although somewhat smaller than those previously brought over, still apparently very satisfactory to his owner, and an animal of great symmetry and promise. The price paid for him at home was one hundred guineas, and his cost by the time he reached his present residence not much short of $1,000.

The herd now includes between eighty and ninety head—the young cows by "Norfolk," and the older ones by "Herod." Mr. Patterson's stock has always been selected more with a view to the dairy qualities, by which the breed was first mainly distinguished, than to that perfection of form, which, together with some diminution in size, characterizes the more recently "improved" importations. He thinks that his stock will run from 25 to 33 per cent. the heavier of the two, but I should scarcely estimate the difference so great. I was really surprised to notice the *evenness* that characterizes all the animals we saw,—and there can be few herds anywhere in which the general average of merit must be ranked so high. Doubtless a judge of greater experience would have perceived differences of much importance to him in considering, as a breeder should, the influence each point in the parent possesses upon his progeny, but I question whether the majority of such committees as render decisions at our State shows, would not have found it a very difficult task to select the best one, or two, or three, from the 15 or 20 head of young stock we saw in one field, while they might have been scarcely less puzzled in deciding the merits of the cows.

Mr. Patterson still adheres to the way of breeding prevalent before the days of Herd Books—only registering the sire of his calves, and not keeping their pedigrees back from dam to dam. Take away, thus, the influence which every item in a pedigree has come to have upon the decisions of most who are at all familiar with them, and where so many are so nearly equal, there might be no two judges whose opinions would exactly coincide. The condition of the herd attests an abundant supply of food, but no over-feeding or stuffing. I was somewhat astonished in view of the smooth coats and soft hides, and well fleshed frames before me, to learn that it has been the custom to let the calves run unsheltered the first winter, with the view of rendering them more hardy. It has also been the practice to "cut the first calf's throat," in order to milk the heifer, and develope her bag well during her first milking season. The calves run with the cows, instead of being brought up by hand and fed the milk from two or three, as it is intimated breeders of fine stock sometimes are obliged to do; and it thus becomes a matter of importance to render the dams large yielders of the food so necessary to the thriftiness of their calves, while the size and fatness in which the latter were found, evidences the successful attainment of this end.

Readers at the south, or elsewhere, who may have been heretofore unsuccessful applicants for the limited surplus Mr. Patterson has heretofore had yearly to dispose of from his Devon herd, will be pleased to learn that this year there is a somewhat larger number offered than usual. Mr. Patterson's address is at the Sykesville post-office.

Other Stock on the Place.

Our host's flock of sheep, mostly, I think, of South-down grades, numbered three hundred. As to swine, after trying Sussex, Essex, Chester County, and two or three other sorts, he had pitched upon the Berkshires as the best bacon makers. A convenient building, constructed of stone in ten compartments, would accommodate 80 or 100 hogs. They are only raised to a sufficient extent, I understood, to supply the demand for the workmen on the estate—little being sold from the farm, except the Devons, some wheat, and a few score of fattened steers, together with the surplus from the sheep flock.

Fourteen or fifteen horses are employed in farm work, and Mr. Patterson has some breeding stock in this department of considerable value. A three-year old blood colt called Sultan, by Childe Harold, was, among several others, examined at length by our company. He stands full 16 hands high, and was remarked as very good in most points which horsemen esteem—long in the arm and short in cannon, beautiful in the pastern, which is neither too long nor too short; wide between the eyes, and very gentle and intelligent in expression; with an excellent back, graceful and spirited action, and the promise of a sufficient modicum of speed. One bright morning when only eight months old, he cleared three post and rail fences in succession, while in frolicsome humor, and when he comes to be broken will probably show that he has lost little of his activity. We also saw a fine old horse now upwards of 27, seventeen hands high, which for 15 years was in Mr. Patterson's constant service as a saddle horse.

In respect to the different kinds of cattle, Mr. Patterson makes a distinction between the words *race* and *breed*, defining the latter as a cross of races. Thus he spoke of the Scotch polled cattle, the Herefords, and the Devons, all of which possess a marked uniformity, as *races*, while Short-Horns and Ayrshires he ranked as *breeds*.

Treatment of Cows with Weak Backs.

MESSRS. TUCKER & SON—Mr. JOHN FLINT of Brooklyn, inquires "what he should have done to save the life of a valuable cow," which was troubled with weakness in the hind parts after calving. One year ago last spring, I had a similar case. One of my cows calved in the pasture, and at evening I put the cow and calf in the stable together, both apparently very well. But the next morning when I went to see them, the cow made several ineffectual efforts to get up, but could not, apparently owing to weakness in her back and hips (as she would readily raise upon her knees.) After I found she could not get up alone, I endeavored, with the assistance of several men, to raise her by means of placing a wide piece of cloth under her, and attaching it overhead to the joists by ropes. But all my efforts failed to relieve her, and I concluded she would die, and left her on a bed of straw. But it was suggested to me to bathe her back with wormwood steeped in vinegar. I did so, putting the liquid on as hot as the hand could bear it, rubbing it in well on the back and hips, and especially just forward of the hips. The bathing and rubbing (with a cloth) were repeated a number of times, and the next day the cow got up without assistance, and has done well ever since. ALONZO GREEN. *Lancaster, N. Y.*

Draining Stiff Clays.

MESSRS. TUCKERS—If your correspondent D. W. J., (see Co. Gent. June 24th, p. 401,) would read my article (see Co. Gent. June 10th, p. 369,) over again, and attentively, I believe, in place of thinking himself a little *witty*, he would think himself a little *soft*—but the only experience I have had in digging into soils to judge of draining, out of this county (Seneca,) was in his county, Niagara. I will tell him how I found it there. A gentleman a few years ago wrote me, requesting me to go there and give him my ideas respecting some fields he wished to improve. When I went there, I found the surface very wet from a heavy shower that had fallen a few hours previous, but I thought there would be no difficulty in draining it, and went right to work to aid the owner in staking out a number of drains. Next morning I went to take another look at what we had done, intending to return home after breakfast, but great was my surprise, to find the surface of the fields still very wet, while no more rain had fallen. At my request the gentleman placed a number of men and spades at my service to examine the subsoil. A few inches below the surface I found a stiff blue clay for about ten inches deep, and as impervious to water as so much iron. Underneath that blue clay, I found a red clay, apparently impervious to water, but as water could not get through the blue, I could only guess at that, and after spending the greater part of the day with five men digging holes from four to five feet deep, I found I knew no more how such land could be drained than a man who had never seen a drain dug. I advised the gentleman to try a few experiments by digging a few ditches as I laid them out, and plowing as deep as possible with subsoil plow, but to get no tile until he saw if he could get a run of water. He paid my traveling expenses, treated me very kindly, and I have heard nothing from him since.

Now if your correspondent's soil and subsoil is similar to that soil, I would advise him to feel his way cautiously in draining. Certainly no man would be fool enough to dig ditches and lay tile, if there is no water to carry off. JOHN JOHNSTON.

How to get a Rain Guage.

ANSWER TO "N." (CO GENT. JUNE 10th.)—To make a good, cheap rain guage, go to a tinsmith and get a cup made four inches in diameter and eight inches deep. Before soldering it together, and after cutting out, take an engineer's or surveyor's rule and mark the inches and *tenths* with a scratch awl, commencing at the bottom of the cup—make the marks for inches one inch long; and tenths one-quarter ditto—the half inches might be half an inch long. When the cup is soldered together, you will have the measure on the inside so that you can see the exact depth of rain which has fallen at any time. Take a piece of two inch plank one foot square; set the cup on the center and drive a nail through each corner of the bottom (which should be square and the cup round, thus leaving the corners of the bottom projecting;) set it in the garden or field, away from the fence and trees, and after every shower turn out the water to prevent rust. If made of copper, such as stove boilers are made of, the guage would last a lifetime. Cost of a tin one, about 50 cents; copper, about $1. D. A. A. N.

Composts—Muck and Barn Manure.

In our recent article on composts of muck and ashes, reference was made to a still more profitable use of the first named material, viz: for composting with barn manures. We have also spoken briefly of the importance of bringing manure into a partially decomposed state, before applying it to the soil for the immediate use of crops,—stating muck to be one of the most valuable of absorbents, and to be largely increased in manurial value, by being so employed. We will now bring the testimony of practical men on the point in question, and recall some directions as to the *modus operandi*, which have already been noted in our columns.

"The most practical and profitable mode of using muck," says Mr. BROWNE'S Essay, before quoted, "is to collect and store it in a dry state, convenient to the stalls, and then from day to day to spread upon the animal droppings, twice their bulk of muck. The late Elias Phinney, of Lexington, Mass., estimated three cords of manure composted in this manner, at a higher value than three cords of the droppings alone. Perhaps no other man in the country has given the subject so much attention, or conducted his operations in a more extensive and systematic manner."

The mode of employing it *in the stable*, as an absorbent, practiced by Mr. F. HOLBROOK, of Vt., (who needs no introduction to our readers,) is worthy of particular notice in this connection. His stables are constructed very much on the plan given in No. 15, of the last volume of the Country Gentleman (p. 236,) with a trench just back of the stalls. He says:

"This trench is the place of all places for manufacturing compost manure. Last winter muck was used. It was dug the preceding August, and piled on dry ground near the swamp, to drain and lighten; a part of the heap was carted to the barn, as soon as the cattle were to be stabled in the fall, and the remainder was hauled by the first sledding, and piled near the stable door under a shed open to the south. * * A bushel basketful was put behind each animal every morning. The solid and liquid manure droppings of the day and night fell into the trench upon the muck, the liquid droppings completely saturated it, and the contents of the trench, thus mingled, were thrown out the following morning. In the very coldest days of winter a thin sprinkling of straw, or other litter, was placed over the bottom of the trench, before putting in the muck, which prevented the latter from freezing to the trench. There were but few days, however, cold enough to make this precaution necessary. The cattle always had a bedding of straw or other course litter, which was daily thrown out with the contents of the trench, serving to swell the manure heap, to keep it up light, and to promote fermentation. The compost was minutely and well mingled every day by this mode, and no shovelling over was necessary. The solid and liquid droppings falling upon the muck, fresh and warm from the animals, and coming in contact with every portion of it, produced an immediate and powerful action on it, so that a much larger quantity of muck was well prepared for use in the spring, than could have been properly prepared with the same stock by the ordinary means of composting."

The importance of this extract justifies its length, but leaves little room for extending the present article. We would refer, however, to the use of muck to be spread over the barnyard in the fall, and then covered with the manure made during winter, the whole to be thoroughly mixed together and piled in the spring. After undergoing fermentation in this state, it will prove of high value for crops; better, even, than the usual quality of long manure. Another method often practiced, is to draw the manure from the yard and place it in a heap of alternate layers of muck and manure in the field where it is to be applied. We have practiced this with good effect, and very little extra labor.

That composted barn manure is in its best state for growing crops, and that an addition of muck prevents loss during the process and increases its value, we think well established. Hundreds of opinions and experiments on the subject might be gathered from our agricultural literature, especially that emanating from New-England, where muck abounds, and where manure is esteemed of greater importance and worth more pains-taking than in most other sections of the country.

Drying Rhubarb.

In a late number of the Country Gentleman, I noticed an inquiry from a gentleman relative to drying rhubarb. Rhubarb dries very well, and when well prepared will keep good for an indefinite period. The stalks should be broken off while they are crisp and tender, and cut into pieces about an inch in length. These pieces should then be strung on a thin twine and hung up to dry. Rhubarb shrinks very much in drying, more so than any plant I am acquainted with, and strongly resembles pieces of soft wood. When wanted for use it should be soaked in water over night, and the next day simmered over a slow fire. None of its properties appear to be lost by drying, and it is equally as good a sauce in winter as that made from any other dried fruit. Very few varieties of rhubarb are suitable for drying, as most of them contain too much woody fibre. The best variety of rhubarb for any purpose, is the Victoria when grown in a suitable location. The Mammoth is worthless, owing to its fibrous nature, as are also some other kinds. The consumption of rhubarb is rapidly increasing in our cities and villages, as its merits become known. It is the most wholesome plant I know of, and makes dumplings and pies, that might tempt an epicure. J. A. V.

A Good Crop of Cabbages.

Mr. Blanchard of Lonsdale, R. I., plowed the spring of 1856, one acre of land eight inches deep, manured with 30 cords of good barn-yard manure and swamp muck, mixed thoroughly together. After plowing he harrowed and bushed it; then planted his seed one yard apart each way, four seed in a hill; thinned out when large enough, to one plant in a hill; run the plow or cultivator through every week, till the first of November. Produce 7,200 heads—average weight of cabbages from 12 to 36 pounds—sent to Providence 22 heads, weighing on an average 30 pounds each. Sum received for the whole acre, $700. PETER SIDEBOTHAM. *Late of Valley Falls, R. I., now of Shirley Village, Mass.*

Remedy for Bites and Stings.

As many of our readers are preparing to travel or go to the country for the summer, it may be useful to remind them that an ounce vial of spirits of hartshorn should be considered one of the indispensables, as in case of being bitten or stung by any poisonous animal or insect, the immediate and free application of this alkali as a wash to the part bitten, gives instant, perfect and permanent relief, the bite of a mad dog (we believe) not excepted; so will strong ashes-water.

Editorial Correspondence—X.

From Wilmington, Delaware, across the Christiana river, over the low flats from which the water is diked out, and upon a fine turnpike road, one can see from his wagon some of the very finest farming land of this country, and probably a larger extent of hedging than it can anywhere else boast in an equal territory. There is a strip of soil here, covering a considerable tract—perhaps from 20 to 30 miles in length, and from 5 to 10 in width—which includes a less proportion that is waste and poor, than perhaps any other area we have of the same size—there being few trees to shade it, (whence the scarcity of timber and abundance of hedges,) few stones to obstruct the plowshare, very little that is so wet as to be unavailable, and, with here and there a rare exception, scarce a rood that is not naturally and with fair treatment very productive. When the early settlers first visited the country, they are said to have reported the existence of a bay large enough to ride the navies of the world; but a further examination revealed the fact that the water was mostly very shallow, rising from its channels over a wide extent of country, and experience, (I do not know at how early a day,) taught that by getting rid of this water and banking it out, some of the richest of alluvial deposits might be placed at the disposal of the farmer. And the higher ground back from the marsh, although not so productive I believe, of grass, and notwithstanding twenty or thirty years ago it had been very much worn down if not nearly exhausted—is now like a garden. The labors of several eminent agriculturists, have been devoted to restoring the lost fertility, and extending the knowledge how to do it, more and more widely—among them the lamented CHAUNCY P. HOLCOMB and the late Senator CLAYTON. Here, too have flourished the much-talked of REYBOLD peach orchards. And here there is now carried on some of the best farming the traveller may find after many a long journey—the results of such glances at which as I could get during two days of constant rain, are now at the service of the reader.

"Bloomfield Farm"

Has been occupied for the past eighteen years by Mr. BRYAN JACKSON, who came upon it after nearly twenty years experience upon another place near by. When he began in 1820 or 1821, land within a few miles of the city was in market for $25 to $30 per acre; it was so low in point of productiveness, that three or four bushels of wheat, forty of corn, and thirty of oats, were all it would yield, and as the first was bringing 75 cents, corn 28 cents and oats 18 cents a bushel at that time, farming with such crops and prices, could scarcely be considered a very remunerative business. Apples, Mr. J. remarked, were selling at 15 cents a bushel—which, compared with prices as they now are, does not look as if we had made much advance in giving the country a supply of fruit.

For the past ten years the wheat crop, season with season, has averaged on Bloomfield farm between 23 and 24 bushels per acre, the corn crop between 40 and 50, and oats about 50. Last year 22 acres in the last grain, very much beaten down by the rain, turned out finally 1,236 bushels, a fraction over 56 per acre. Niney tons of hay were cut from 40 acres, which is little if at all above the average.

If one is disposed to inquire how these results have been accomplished, the answer is simple. Mr. Jackson's practice has in a great degree coincided with that of John Johnston, except when the different circumstances of the case involved the use of different means in reaching similar ends. Nearly one-half the 220 acres of his farm are either in meadow or pasture, and he generally keeps a flock of about one hundred sheep, feeds a dozen head of cattle annually, and raises eight to ten calves. He sells however large quantities of hay, for which the market is almost always a good one, and, that the land may not suffer, buys a hundred wagon loads of manure, and in addition uses lime whenever expedient. He began by liming at the rate of 40 to 50 bushels per acre, and now applies 20 to 30 more at intervals of five or six years, as it seems to be demanded. His plan is to plow the oat stubble about the middle of August, and a second time from the 25th September to 1st October; to sow as soon after the wheat has been drilled in as possible, four to five quarts timothy seed per acre, and the following spring six quarts of clover. The first year the field is pastured, the second mowed for hay; a good dressing of composted manure is applied about the breaking up of winter, and a crop of corn put in; after corn, oats succeed, and the rotation continues as above. Like all his neighbors, Mr. J. *drills in* his grain crops, but I believe he was the first to set the example; at any rate he imported a drill as early as 1838, and an implement manufacturer in Wilmington made others after it, which in time he sold quite extensively.

Mr. Jackson's land is generally a pretty stiff clay, about 20 acres however being a sandy loam. Eight acres which were too swampy to put to any practicable use, he reclaimed by means of board underdrains, of which he has laid between 14,000 and 16,000 feet. They were constructed of six inch boards at a cost of $15 per thousand feet, and this is now one of the very best parts of his farm.

The culture of cabbages for the city market is found to be about the most profitable use to which the land can be devoted. Mentioning an instance I had seen in which grass seed had taken on land beaten down compactly, better than in other parts of the field, Mr. J. showed me some cabbage plants sown upon a patch of ground previously made quite hard, I think by treading, which had come up and were doing remarkably well. The culture of roots Mr. J. has also been long engaged in, having begun with the ruta baga 30 years ago, and having grown large quantities also of carrots and parsnips. The last his experience has led him to think preferable for milch cows, while for horses he considers carrots the best food, and ruta bagas for fattening and working cattle and sheep. The breed of sheep he finds to pay the best for feeding is the Cotswold, or a grade of this blood. He had at the time of my visit a much smaller flock than usual, but such of the Cotswolds as we could get out in the rain to look at, were of the best description.

He has this year 30 acres in oats and 43 in corn—the latter planted three and a half by four feet apart, and kept clean entirely by the cultivator, no hoeing being done. The cultivator is put through it about five times, three lengthwise and twice across the field. A very commodious granary with corn cribs below, the building 44 feet by 36, has been recently erected, and will accommodate at least 2,000 bushels in the ear, and above large quantities of the small grains. In the sta-

bles near by, we visited Mr. Jackson's Devons, of which breed he has conceived a high opinion.

The sketch I have been giving of Mr. Jackson's operations is rendered very much more imperfect than it would otherwise have been, by the length of time that has elapsed since my visit; and I should not close without according him the credit of being a much better farmer than would perhaps appear from anything I have yet said. His cash accounts afford testimony to the correctness of the principles upon which he acts; and, as the world goes, there are few better tests of one's business faculties. It may serve as an illustration of these principles, as well as of their success, to add that Mr. J. has been a constant reader of *The Cultivator* and *Country Gentleman*, and one of the most prominent members and an active mainstay of the Agricultural Society of New-Castle County.

Cure for Hog Cholera.

Mr. Jackson gave me a bit of his experience with this troublesome complaint, including a remedy which proved beneficial, and at length affected an entire cure. This was to put tar in the bottom of the trough—say a pint in one twelve feet long, and a couple of ounces of flour of sulphur; then one ounce of dissolved saltpeter was put with the swill into the trough once a day, and chloride of lime was sprinkled about their sleeping places. They seemed cured, but after running to pasture about a month were again attacked, when a second trial of the same means finally drove off the disease.

Marsh Manor.

Through the rain, steady and dispiriting as it was, my friend and his son kindly drove out with me to see what we could of the country. Continuing for some distance on the turnpike, and then turning off toward the river, we came to the residence of William Reybold, Esq., not far from Delaware City, who here occupies a fine estate of 460 acres, and has another farm within a short distance, of 375 in addition. His orchards formerly sent five, six, or seven thousand baskets of peaches a night to New-York for a period of about six weeks, employing several steamboats for the purpose; and 70 acres, 30 of them in three year old, and 40 in four year old trees, one year netted their owner the handsome figure of $12,000. But the days of the peach in all these coasts, seem to be numbered; their glory and profit have departed. Some mysterious disease has for five years past kept them declining, and for the last two they have not *paid*. The ax has been laid at the root of their once fruitful and money-bringing boughs, and, trunk and branch and twig, they are now being cut down and hewed to pieces for firewood! Is it not to the reflective pomologist, a melancholy fate?—to the lover of fruit, a sad misfortune? Newly planted orchards on land where a peach tree never grew, seem to fare no better; they sicken, lose all their thrift, and apparently die by inches.

We hazarded wet feet and backs to see such of the stock as were pastured near the house, and to glance at the extensive and commodious barns which shelter them all in winter, and many of them during the nights and heavy rains at other seasons. The Cotswolds are of course the main attraction—a flock that contests the palm with those of Col. Ware of Virginia, and Henry Carroll, Esq., of Maryland, at all the Southern exhibitions at which they appear—sometimes one winning, I believe, and sometimes another, but together making as grand a show of the breed as one would wish to see. Mr. Reybold's flock is very extensive, numbering I think 200 head, and they have been bred on the place for some 30 years, in the hands of his father, brother, or himself. Mr. R. gave me a photograph of a sheep raised by him in 1853, and shown at the U. S. Ag. Society's Philadelphia exhibition when four years old, at which time the portrait was taken. He had been fattened for the butcher, and when slaughtered his live weight was 362 pounds, and weight when dressed 269½. His length from nose to insertion of tail was 60 inches, from heel to heel, over the shoulders, 72½ inches, and the circumference around the body, behind the shoulders, 51 inches. He was weighed at home before the transportation to Philadelphia and a week's exhibition there, and then weighed 374 pounds. The weight of his wool for each of three years had been from 17 to 18 lbs. well washed, and its length from 8 to 12 inches. This remarkable animal will justify a high opinion of the Cotswolds or New Oxfordshires, for feeding for market, as well as for the production of large quantities of a wool particularly valuable for worsteds and similar manufactures.

Quite a curiosity here, too, are the *Holstein Cattle*—a breed which our farmers at the north know little of, as they are seldom seen at our shows or discussed in our journals. It is a kind of great value as milkers, and Mr. R.'s herd must be the largest if not nearly the only one of unmixed blood. He has 12 head of aged animals, and 20 of young stock—mostly or entirely from importations made many years ago by his father and brother, Messrs. Philip and Clayton Reybold.

Mr. R. does an extensive dairy business, having on both his farms about one hundred milking cows. He purchases for the purpose mostly heifers, partly from droves that not unfrequently come along from the eastern states, and partly from those bred at the west. It is thought preferable to purchase heifers to cows, as good cows are seldom sold to go away from home, while an experienced eye can judge pretty well of the promise a heifer affords. We looked over one of the ranges of sheep barns—the main building being a fine structure 115 feet by 40; finding everything arranged as might have been anticipated, with a view to economy of space and labor, and the comfort and ventilation of the sheep-rooms.

Mr. John Reybold's fine hay farm we could not visit in the rain—as worthy as it must be, from what I heard, of some effort to see it.

The hedges along the roads are mostly of the Virginia thorn. When taken care of, it does well for a considerable series of years, but has been found in time to become imperfect, and show signs of dying out. Many are now experimenting with the Osage Orange; and, as far as I could learn, the result had been very satisfactory, and it will doubtless soon become the great hedge plant of this region. Many of the roads under brighter skies must be very beautiful, lined as they are with these living fences.

Milking Young Cows.—It is said that young cows, the first year they give milk, may be made, with careful milking and good keeping, to give milk almost any length of time deemed desirable; but that if they are allowed to dry up early in the fall, they will, if they have a calf at the same season, dry up at the same time each succeeding year, and nothing but extra feed will prevent it, and that but for a short time.

The Rice Weevil.

EDS. COUNTRY GENTLEMAN—I send for your inspection a specimen of "Tuscan beardless Barley," with the curculio weevil to match. I received this seed in a bag from the Patent office two years ago. By some oversight it was not put in the ground, but remained in the bottom of the seed chest in a warm, dry place. This spring in overhauling the seed chest, the bag of beardless barley turned up in the situation or condition of the portion I send you.

In the Cyclopedia Londinensis, vol. 5, page 480, this weevil is described, and shown in fig. 8 of the adjoining plate. The text calls it the "*Granary Curculio*" or "*Weevil*," and adds, "wherever these injurious species are discovered, the granary should be strewed all over with boughs of elder or henbane, which will destroy them." J. R. ST. JOHN. *Niagara county, June 27.*

The vial sent by our correspondent contains a weevil to nearly every grain. It is not the *Calandra granaria* or granary weevil, but the *C. Oryzæ* or rice weevil, another of the Curculionidæ, very destructive sometimes to the rice of the East Indies and the wheat in Southern Europe. The climate here is too cold for them to do any injury to a crop. There were probably a few of the eggs in the seed obtained by our correspondent, which hatched, and have continued since to multiply and reproduce themselves in the warm shelter where the grain was put. This insect is similar in the transformations it undergoes to those of the *C. granaria*, but the weevils are rather shorter and not so smooth. Morton's Cyclopedia of Agriculture describes both—vol. i, p. 371.

Cheap Shades—Transplanting Corn.

MESSRS. EDITORS—Enclosed I send a pair of shades, such as I use in my garden and fields to shade cabbage, beets, and other transplanted plants. The stems can be made of any suitable length, and if the paper is oiled they will last several seasons. I like the one made with a small tack best, though the other answers a good purpose, and is made with less trouble. The shades I send are taken from a large number which I prepared for use. They will answer a good purpose for *corn;* the surplus plants in one hill being taken to fill blanks in another. Our farmers here generally ridicule the idea of transplanting corn, but my experience leads me to believe that it will pay to do so. I make a mixture of fresh cow dung and loam, and dilute with water until it is about as thick as molasses in cold weather. The corn plants are taken up with a trowel, and placed in the mixture, where they remain until set out. When set out they are shaded with a paper shade a little larger than those I send you. They require no water or other attention, and the loss will not amount to five plants in a hundred. I omitted to say that I set them out with a dibble or round stick, which enables me to bring the earth close round them. I prefer to set them out immediately before or about two days after a rain. Will you please suggest to your numerous readers to try the experiment, and report the result when the corn is ripe. J. I. SHIPMAN.

Our correspondent sends two shades—one a square piece of paper, with a fold in the middle inserted into a split in the top of the stick, and there held in position. The other piece of paper has a fold across the middle *both ways*, by which means six thicknesses of it come where the two folds cross; here a tack is driven through into the top of the stick, and this kind, he says, he prefers to the other. The "stick" is merely a bit of wood four or five inches long, sharpened at bottom to stick into the ground, and having at top the paper shade five or six inches square, as above described. EDS.

The Wheat Midge.

A correspondent of the *Rural New-Yorker* of 22d of May, dating from Monroe Co., N. Y., says:

"As it is a matter of serious contemplation with the farmers of the Genesee Valley whether the wheat midge will remain permanently among us or not, it becomes important to know, as far as possible, how long they may be expected to bring ruin and desolation to our wheat crop."

And he asks:

"How long have they already been infecting districts and localities visited by them before us? Is there a reasonable prospect that they will show us the cold shoulder and take their final exit soon? Or shall we be compelled, (against our will and interest too,) to change our system of farming altogether, or may we hope for a better time coming."

Judging from our long acquaintance with the wheat midge and its ravages, we can offer the writer of the above, no hope "for a better time coming," and think it will be a long time before the midge will give the wheat growers of Monroe county the "cold shoulder, and take their final exit." It is now about twenty-five years since it first made its appearance in New-Hampshire, and its ravages were greater on our wheat crops last season, than on almost any previous year; they being much more abundant on the "hill farms" than ever before known, while in the valleys many fields produced little more than the seed sown. But from their first appearance among us till now, they have every year damaged the crops of spring wheat, some years to greater extent than in other seasons.

Says the late Dr. HARRIS, in his Report on Insects:

"The country over which it has spread, has continued to suffer more or less from its alarming depredations, the loss by which has been found to vary from about one tenth part to nearly the whole of the annual crop of wheat; nor has the insect entirely disappeared in any place till it has been starved out by a change of agriculture, or by the substitution of late spring wheat for the other varieties of grain."

Very early sown spring wheat sometimes escapes the ravages of the insect, it having become too far advanced before the annual appearance of the fly—so too, very late sown, that sown as late as the 25th of May, generally escapes the midge, the fly having disappeared before the grain is in blossom; but there is greater liability to rust, mildew, blight, &c., on the very late sown wheat, than on that sown early.

About six years ago some of our farmers began to sow winter wheat, and they were successful. The quantity sown each successive year has greatly increased. When sown from the 20th of August to 15th of September, on suitable ground, and properly manured and put in, we scarcely know of a failure to reap good crops; and of such in no instance have we known any injury to them from the midge. Why the midge should ruin your Genesee Valley winter wheat and leave ours unscathed, is a mystery not so easily solved. Our winter wheat gets the start of the midge! Why don't yours?

Last year we had three small fields of winter wheat on different varieties of soil, but all did well, getting a return of about twenty fold for seed sown; also had, within a short distance, a field of spring-sown wheat. At harvest time the grain would average four and a half feet high—heads at least five inches in length—neither rust or mildew touched it, yet the yield was only seven pecks to the bushel of seed, in consequence of the depredations of the midge. L. BARTLETT *Warner, N. H., June*, 1858.

Fruits, &c.—Random Notes.

DWARF PEARS.—H. E. HOOKER of Rochester, recently showed us a tree of the Glout Morceau pear, which last year bore, according to his statement, (and no one is more reliable and accurate,) one barrel of fruit. It is eight or nine years old, is worked on the quince, and presents an exceedingly thrifty appearance. In common with the other pear trees in that region, it bears but few this year. The union between the pear and the quince is at the surface of the earth—the graft has not in the least outgrown the stock, but both present an even surface. *It does not stand in or near grass;* and what many would regard as unreasonably laborious, the soil is as clean and mellow as it usually made among a crop of beans or potatoes. The tree has had but little pruning. We omitted to ask the price at which the pears sold in market; but Glout Morceaus from another garden two miles distant, sold the previous year when ripe, at two to three dollars per dozen.

On the same premises there are more than an acre of dwarfs, four years growth since setting, now forming fine pyramids seven or eight feet high. This being an unusully unproductive year, they are now bearing but little, but are making a most vigorous growth. They are in rows eight feet apart each way, and the ground is kept, at very little expense, constantly clean and mellow, by the use of a two-horse cultivator.

STRAWBERRIES.—The strawberry is largely cultivated for the purpose of testing, on these grounds. We found the *Hooker* maintaining its high reputation for large size; perfect, full, and plump berries; great productiveness and excellent flavor. Berries an inch and a fourth, and even an inch and a third in diameter, are not uncommon. Its defects are, too soft a texture for marketing—and a liability to injure by the cold of winter, in consequence of the protrusion of the crowns of the plants above the surface of the ground. *Walker's Seedling* proves good and productive, but too small. *Scott's seedling* is large and showy, but lacks flavor. *Genesee* continues to be a fine and handsome variety. *Triomphe de Gand* is very large and good, and more productive than many foreign sorts. *McAvoy's Superior* and *Longworth's Prolific*, do not maintain a very high reputation, compared with some others.

On the adjoining grounds of SELAH MATHEWS, we found an equally thrifty orchard of dwarf pears, with the exception of a few that had been removed last spring,) and kept similarly cultivated. The few that had been removed, and which were doing well, bore each last year from one to two bushels of pears. This orchard of dwarfs is intended entirely for the private supply of the family. In the adjoining hot-house we saw a George IV peach tree four feet high, on which there were twenty-eight beautiful, fully ripened peaches, measuring each two and a half inches in diameter. Eight or ten had been previously picked from the tree. This is an usual crop for hot-house culture, the peaches being ripe, while the fruit on the trees outside was not more than one-tenth grown.

On another lot is a Bartlett pear, on pear roots, 15 years old, which bore two barrels of fruit last year. Its cultivation appeared to be rather neglected at present.

OSAGE HEDGES.—One of the best Osage hedges we have met with, forms the barrier between the grounds of H. E. HOOKER and the public road. It is very broad at bottom and very dense—the two most important requisites in a good hedge. We saw this hedge when it was four years old, at which time it formed a complete protection; since which it was killed partly down by a severe winter, but the dead shoots proved quite as efficient as green ones, until a new growth sprung up, which speedily took place. It is now about seven years old, and is impenetrable.

Profits of Poultry.

We have no doubt that the business of keeping and raising poultry may, if well managed, be made as profitable as any other branch usually carried on upon a farm, in proportion to the capital invested and the labor bestowed upon it, nor would we hesitate to recommend it as a business which would pay well for greater attention and care than are usually bestowed upon it, especially when there are children in the family of suitable age and good tact for hunting eggs, feeding and rearing chickens, &c.; but nevertheless we think such instances as the following must be quite rare, as they require a combination of a *very good* market and *very good* luck, with perhaps some other things added.

Mr. D. H. Fitch of Norwalk, Conn., gives the following statement of his experience in the hen business, in the columns of *The Homestead*. His expenditures were,

1856. April 19.	For 15 hens and 3 roosters,	$7.87	
1858. Jan'ry 1.	For feed to date,	204.31	
" "	" freight expenses,	2.94	
" "	" time dressing 304 chickens,	6.08	
			$221.20

His receipts were,

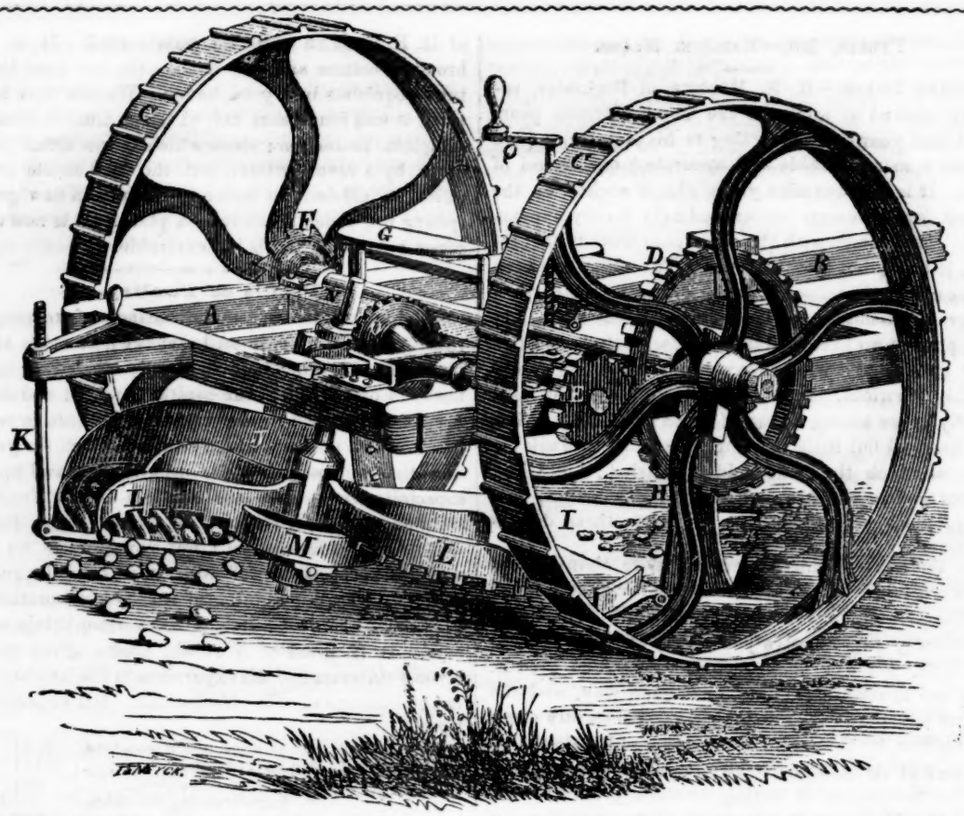
1858. Jan. 1.	By 304 chickens sold,	$145.80	
" "	" 8,748 eggs to date,	142.18	
" "	" 39 lbs feathers,	7.20	
" "	" 24 bush. manure,	9.60	
" "	" 115 fowls on hand,	60.10	
			369.88

Making a balance of nett gain in one year, eight months and twelve days, of $148.69

Mr. Joseph Mace of Amherst, N. H., sends a statement of his profits in keeping and raising poultry, to the *N. E. Farmer*, of which the following is the substance: His stock of poultry consists of a lot of domestic fowls, a few half-wild turkeys, and a few Bremen geese. His domestic fowls comprise the Cochin, Spanish, and Polish hen. He prefers the Bremen geese to any other variety, because their feathers are purer white, and because they produce nearly double the quantity of the common kinds; their flesh also is far superior both in weight and quality. His stock of poultry, Jan. 1, 1857, was as follows: 22 hens, 3 roosters, 3 hen turkeys, 3 geese, (or 2 geese and 1 gander.) He raised 100 chickens, 66 turkeys and 25 goslings from the same.

Amount of capital invested in fowls,		$15.00
" " " for grain,		50.60
		$65.60
Amount of poultry sold,	$93.33	
" used in family,	6.00	
" of eggs sold,	16.33	
" of stock on hand,	22.00	
		137.66
Profit,		$72.06

In this account there is no credit given for the eggs used by the family, nor for the feathers produced by the geese, which Mr. Mace estimates at about $6, and which would go a good way towards paying for dressing and marketing.



Hardenbergh's Improved Potato Digger.

The subject of the accompanying engraving will prove a very valuable labor-saving machine, from the great quantity of potatoes it will dig, in comparison with the number raised by the same amount of hand labor. The operation of the machine will be understood from the following description, reference being had to the illustration. A is a strong frame which is drawn by the shaft B, and is supported on the wheels C. Inside of one of these wheels is a geared wheel, D, and on the axle of the wheels are ratchets and pawls, F, so arranged that the gear wheels shall only be rotated when the machine moves forward, and remain at rest when the machine is backed or is turning at the end of a row. From the frame, A, is suspended by means of supports, H, a broad digger or spade, I, and these supports being connected with a cross bar at the top, this digger can be raised or lowered to pass the requisite depth into the ground under the potatoes, by means of a screw and crank, Q, and the platform and adjuncts immediately to be described can be made to enter the ground at any angle by the screw rod, K, the digger being suspended from H by a hinge or axle. G is the driver's seat.

A small gear wheel, E, works from D, a bevel wheel, O, placed on the end of its shaft, and both these can be disconnected so as not to receive any motion from D, by the lever P. The bevel wheel O rotates the shaft N, by another bevel wheel, and this shaft has on its lower end four arms, L, which scrape the potatoes from the dirt as they are dug up by I, and clean them by bringing them through the grooves in the platform J. The bearing of N is protected by a rim M, so that no dirt can enter and interfere with its free working, and to which the bearing is hinged that it may conform to the inequalities of the ground, and the angle at which the platform is placed.

It is a simple and perfect machine and is the invention of J. E Hardenbergh of Fultonville, N. Y., from whom any more desired information concerning rights, can be obtained.—*Scientific American.*

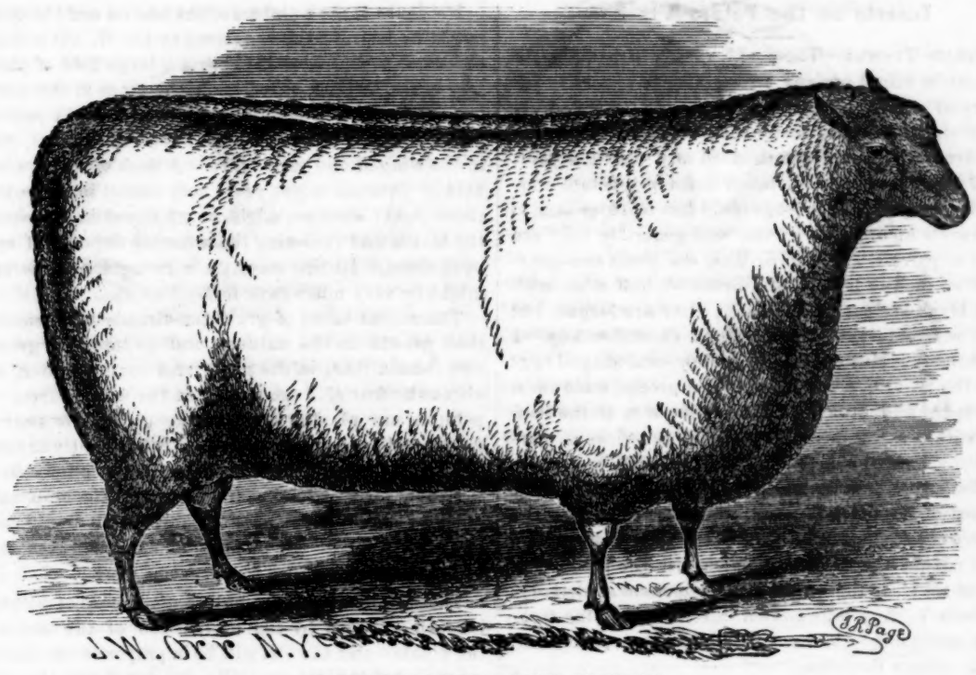
Forest Trees for the Prairies.

B. R. PALMER may be informed that the Sugar Maple grows readily from seed. The seeds ripen in October, and might be planted immediately if the ground is in good order and not liable to bake. If the soil is heavy clay, it will be best to mix the seeds with moist sand in a box that has enough holes or cracks in the bottom to let all surplus water pass out, and cover the box so that the seeds may keep moist *but not wet*, until spring, when they may be planted. It will however, probably be more satisfactory to buy the plants ready grown, than to trust the seeds to unskillful hands. Well rooted plants, six to nine inches high, can be had here for $5 per 1,000. The Sugar Maple is entirely hardy in Central and Northern Minnesota. I have seen large forests of it north of St. Anthony. It grows on several of the streams in Iowa as thrifty as elsewhere.

The Lombardy and Italian poplar, and Abele or Silver poplar, grow readily from cuttings—make a very rapid growth, and in the hands of a man of taste would do better than nothing, while better trees were coming forward. I think it would be a good investment to plant a few acres of these for firewood where timber is scarce.

I consider the Scotch Fir the best evergreen for a grove on the prairies, considering hardiness, rapidity of growth, beauty, and cheapness. We sell good plants, six inches high, for $10 per 1,000. Norway Spruce is a better tree, but does not grow so rapidly, and costs more, say $15 to $25 per 1,000. Arborvitæ also does well planted closely, but does not preserve its green color well in winter—price, $10 to $15 per 1,000. Red Cedar has been recommended by some, but it is not sufficiently hardy in exposed situations. All evergreens do best transplanted in the spring.

If western men would endeavor to improve their homes, instead of striving so eagerly to add to their acres, I believe in the end they would have more money, easier consciences, and the *world* would be benefitted. E. Y. TEAS. *Richmond, Indiana.*



SOUTH DOWN RAM MASTER FORDHAM.

Shipment of South Down Sheep to California.

MESSRS. LUTHER TUCKER & SON—I witnessed some few days since, the departure of a lot of South Down sheep for California, on board the steamer Moses Taylor; and it was doubly gratifying to me to know that they were from the farm of Mr. J. C. TAYLOR of Holmdel, Monmouth Co., N. J. They consisted of eight rams and two ewes. The price obtained for them in cash, before they were delivered on shipboard, was the highest average price ever received in this country—a much higher average than that of my ram sale of 1856. They were purchased by Messrs. J. W. MOWE and J. W. HAINES, of Sacramento, Cal., owners of some thousands of sheep, Mexican and American mixed, and they want these South Down rams to cross for improving mutton.

I forward you a block of Mr. Taylor's South-Down ram "Master Fordham," he being one of the lot sold. The price obtained for him was $300, being one hundred dollars more than any South-Down ram has sold for which was bred in this country. Mr. Taylor was induced to sell this ram, owing to his having secured from Mr. WEBB, a ram, which is now afloat, known to be the highest priced and finest qualitied South-Down ram ever shipped to this country. Mr. Taylor's flock being established as a full bred Webb flock and nothing else in it, Mr. Webb has secured to Mr. Taylor this sheep, to breed upon the get of the celebrated imported bucks "Young York" and "Frank," and also to a few of the get of the American bred ram "Master Fordham," as he at the time of his shipment to California, weighed more than any of the other celebrated rams at the same age, and equalled, if not surpassed, them in form and beauty. Mr. Taylor's sales for the last two years, notwithstanding the hard times for fancy articles, have fully established his success as a breeder. L. G. MORRIS. *Mount Fordham, July 22.*

A New Kind of Wheat.

MESSRS. TUCKER & SON—I send you herewith some wheat, called "Goose Wheat." It was found in the crops of wild geese, shut on a desolate island in the North Pacific, and planted here last year. It is known to yield well, and the straw to be good fodder, about equal to hay. It is said to be equal to rice when cracked and boiled. It is also said to be difficult to grind it fine on acount of its hardness. It is presumed that it will do well on the old rye-fields of the Eastern States. It is known to make good bread, of a yellowish color. It is not known if best in your climate to plant in fall or spring; let half be planted this fall, and the other in the spring, and mark the difference. I am of the opinion that it will be a valuable grain to the New England States and New-York. Please to experiment with it yourself, or give it to some one who will do so properly. I am told that the straw when green, is equal to the Chinese sugar cane for its saccharine sap. A. K. BENTON. *Campo Seco, Calaveras Co., Cala*

[We are much obliged to our correspondent for the seed enclosed with the above. We shall place it in safe hands for trial, and report the results another year.]

CHESTER CO. (PA.) AG. SOCIETY.—We are indebted to the Treasurer, J. LACEY DARLINGTON, Esq., for the Premium List of this Society, whose Fair, which is to be held at West-Chester on the 1st and 2d of October, we hope to have the pleasure of attending. We tender the Managers of the Society our thanks for their liberal appreciation of our Journals, manifested by placing one hundred copies of the COUNTRY GENTLEMAN and sixty of THE CULTIVATOR, on their Premium List.

THE VERMONT STATE FAIR is to be held at Burlington on the 14th and 17th Sept., and we doubt not will be largely attended by the farmers of Eastern and Northern New-York, as a liberal list of premiums is offered for horses, cattle and sheep from out of the State. The Address is to be delivered by Hon. JACOB COLLAMER.

Insects on the Potato Vines.

FRIEND TUCKER—Thee will very much oblige, if thee can'st afford me any information in regard to the history of certain insects, that have badly infested my potato vines, the past two or three seasons. This year they are more numerous than in any previous year, and I fear they will very much lessen my potato crop. Nearly every hill in a large field has more or less of the insects among the leaves, and generally they are found in pairs. The bugs or flies, are about one-quarter of an inch in length, of a brownish-buff color, with three black stripes on the back; they are larger, but much resemble the yellow striped cucumber bug. I find numerous clusters of dark yellow, oval shaped eggs upon the leaves, a dozen or so in a group, some upon the upper, and others on the under side of the leaf And within a few days, I find upon the vines numerous filthy looking slugs, and they are rapidly devouring the leaves, leaving the ribs and leaf-stalks entirely stripped of the foliage. Are the eggs and the slugs the produce of the striped fly? Do they injure or lessen the crop? Have they any connection with the potato disease or rot? Is there any feasible method of destroying them? Any information in reference to the foregoing questions, will be thankfully received by thy friend. OBED BUFFUM.

The striped insect about which friend B writes, is the "three-tined leaf-beetle" of the entomologists. It is about one-fourth of an inch long, of a rusty buff or nankin-yellow color, with two black dots on the back of the neck, and three black stripes on the back, viz: one on each wing-cover, and one in the middle on the inner edges of the same. They appear early in June on the leaves of the potato vines, having at that time recently come out of the ground, where they pass the winter in the pupa state. They (the winged insect) eat the leaves of the potato, gnawing irregular holes through them; and in the course of a few days, begin to lay their oval golden yellow eggs, which are glued to the leaves, in parcels of six or eight together. The grubs, which are hatched in about a fortnight afterwards, are of a dirty yellowish or ashen white color, with a darker colored head. After making a hearty meal upon the leaves of the potato, they cover themselves with their own filth. In eating, the grubs move backwards, never devouring the portion of the leaf immediately before the head, but that which lies under it. Their numbers are sometimes very great, and the leaves are then covered and nearly consumed by these filthy insects. In about fifteen days, they leave the plant and bury themselves in the ground—there they form the necessary cell for passing through the change from the grub to the perfect insect, which occupies about fifteen days. The beetles come out of the ground towards the end of July, or early in August, and lay their eggs for a second brood of grubs; these come to their growth and go into the ground in the autumn, and remain there in the pupa form during winter.

We are indebted to the late Prof. Harris' work on insects for much of the foregoing history of the potato beetle—and he says "the only method that occurs to me, by which we may get rid of these insects, when they are so numerous as to be injurious to plants, is to brush them from the leaves into shallow vessels containing a little salt and water or vinegar."

No doubt large numbers of the beetles and the grubs might be destroyed as suggested by Dr. H., but it would be rather a slow way of ridding a large field of them. Dry ashes, or lime, sifted upon the vines in the morning, while the dew was upon the leaves, might perhaps prove useful in ridding the plants of the insects, both in the winged and grub state. A flock of turkeys in a field of potatoes might prove very useful in destroying these pests; children might be employed in examining the leaves and removing those having deposits of eggs upon them. In this way, their ravages and increase might be very much curtailed.

The second brood of grubs (as already said) come to their growth in the autumn, and go into the ground and remain there in the pupa form during winter, and about the first of June appear in the winged form. If potatoes are planted on the same ground, or near it, for several years in succession, as is frequently the case in kitchen gardens, the insects become so numerous in course of three or four years, as to ruin the crop, as we know by actual experience. Therefore, it would seem advisable to plant the potatoes at some distance from where they were grown the previous year.

There can be no doubt but what the crop of potatoes is much lessened by the destruction of the leaves of the plants—and the loss will be in proportion to the destruction of the leaves. We do not think that the "bugs or their progeny" have any connection with the potato rot. Two years ago our early potatoes were nearly ruined by the ravages "of these filthy insects," but there was no rot in the tubers of the scanty crop.

These insects, like the grasshopper and some others, may soon disappear from localities where they are now so numerous, or they may, like the wheat midge, become a "permanent fixture," to blast the hopes of the farmer in growing profitable crops of potatoes.

Wheat Growing in Delaware.

["I feel somewnat in high dudgeon," writes our correspondent in a private note, "that you should have called on so many of our friends and neighbors in Maryland, without giving us in Delaware a call." From this week's paper, however, he will learn that we *did* see something of Delaware; we regret that owing to the stormy week, we could not have gone as far as Middletown, and shall hope to complete the visit at some future day. Meantime, he will accept thanks for his contributions, and excuse us for the omission of a part, on which there are too many views too widely differing from each other, to hope for any available result from the discussion of the subject in our columns, already crowded as they are, and devoted more especially to *practical* than to *political* Agriculture. EDS.]

MESSRS. EDITORS—We are in the height of the wheat harvest hereabouts; and although we have heard as usual, a good deal said about the ravages of the locust, the grasshopper, the chinch bug, the joint worm, the army and the grub worm, the weevil, the Hessian fly, the scab, smut and the fungii, with something about the winter kill and overflow—all of these reports mostly from the sunny south and the much boasted west—the crop I am pleased to say, is still about a full average with us. The fancy wheats—all the varieties of the white and beardless particularly—the Velvet and the Gale's wheat, have suffered from some cause or other, mostly the scab and rust—we have no smut. There was, however, not much of any other variety than the old Mediterranean of the importation of 1819, sowed in this section of the state, nor

has there been for the past 20 years as a general sowing. The Mediterranean, when first sown, was a coarse, unsightly, large grained, half shrivelled, dark-looking wheat, not liked by our Brandywine millers—rejected by some of them as not fit to grind at the price of ordinary reds. But a few farmers who tried the early sowing in August, and some in July—found that the straw was stiffer, and that it was not as liable to be injured by the Hessian fly, and as it ripened when sown so early some ten days earlier than the varieties then sown, of the old reds, the yellow bearded, and the smooth head, caga and blue stem white wheats—it became more in favor, having in the meantime become more acclimated, plumper in shape, and being less liable from the attacks by fly, from the stiffness of the straw, and less liable to rust and scab, by being earlier, consequently escaping those three enemies of the wheat. It is now the favorite and most certain crop, and of a quality known in the market as best of the reds, producing when well sown on good fields from 20 to 40 bushels per acre. I have known 47 bushels on corn ground the field through; and from the appearance of the shocks, much of the wheat of the present season will range with the above rates, and those averages are all made on land that in 1832 would scarcely produce an average of five bushels per acre, and which was purchased since then at an average of $10 per acre.

The most of these lands have been brought up from that worn-out condition by the application of lime and clover. One of the best shocking fields of the neighborhood, Wheatland, my own, has been brought up fairly by the use of lime and clover. The first dressing put on in 1836, of 40 bushels of quick-lime on corn followed with wheat—corn with clover turned under without pasturing—produced 24 bushels. After several rotations between times, in 1848 this encouraged me to lime again, and in 1849 I put the same stubble field in corn, and gave the corn a dressing of 50 bushels to the acre. This was too heavy—40 bushels would have done better; the corn was injured by it. This I laid to the wire-worm, and thought I would remedy it, and planted it with corn the following season, but had still less corn than the year previous. I however cut off the corn, sowed with wheat followed with clover, and had a fair crop of wheat, and a tremendous field of clover. A portion, say 32 acres of this field of clover, after standing two years with light pasturing, I turned under well in July, and sowed with wheat in 1852—cut and saved 37½ bushels in the harvest of 1853, besides losing all the rakings from continued rains, which would have swelled the crop to 40 bushels and over, had all been saved. That same field is now in wheat, and from the appearance of the shocks, bids fair to be as good as that of 1853—without any dressing of manures except as before, two years of clover and lightly pastured—well turned under in July last, and sown in last of August and first week of September.

Thus in the short space of 20 years we have increased the value of our land by better cultivation and the introduction of fertilizers and improved implements, till both our land and our crops have been increased in value over tenfold. Much land that we bought at ten, yea five dollars per acre, cannot now be purchased for $120 per acre, and the production of our crops of wheat has been increased from five or less to forty bushels per acre. JOHN JONES. *Middletown, New Castle Co., Delaware.*

Absorbent Power of Soils.

ABSORPTION, defined by WEBSTER as "the act or process of imbibing by substances which drink in and retain liquids," is a quality possessed by all soils in a greater or less degree. And of this difference in capacity, especially as regards absorbing and retaining manures, something has long been known, and has given rise to the application of the terms "hungry" and "quick," to loose and gravelly soils, because they do not long show the effect, and speedily manifest the action of manures, while clays were said to "hold" the fertilizing matters applied. The investigations of chemistry show that beside what would naturally result from the different mechanical action—the compactness or porosity of the soil—there are differences in their chemical affinities for acids, alkalies and gases, which vary their power of absorbing and retaining the elements of fertility derived from manures.

Loamy and aluminous soils were found by Prof. WAY to possess the power, when used as a leach or filter, of retaining the ammonia, phosphoric acid, potash, etc., contained in the drainage of a London sewer—the very elements most valuable for manure—and to have the wonderful property, not only to select, but to retain these elements against every power naturally brought to bear upon them, save the growth of plants themselves. "A power," he remarks, "is here found to reside in soils, by virtue of which not only is rain unable to wash out of them those soluble ingredients forming a necessary condition of vegetation, but even these compounds, when introduced artificially by manures, are laid hold of and fixed in the soil to the absolute preclusion of any loss, either by rain or evaporation."

These conclusions seem to show that on most soils (one class of experiments was made with light loam) manure may be applied at any time in the season with equal good results—that there is no danger of loss when actually mixed with the soil, either by filtration or evaporation. Further experiments are needed to prove the absolute correctness of these conclusions to the general mind, but there are those who believe they may act upon them with safety. If established, much labor may be saved in the application of manures. They may be drawn in the fall and plowed under, or left spread upon the surface, or may be distributed in winter instead of immediately before planting and sowing, which is ever the most hurrying season of the year. For ourself, on clays or heavy lands, we would not hesitate to act upon these suggestions.

Some experiments tried in England several years since by Mr. THOMPSON, to ascertain the power of the soil to retain unimpaired in value, manure applied during winter, and also its power to hold in *suspension* the fixed ammonia of barn-yard tanks and manure heaps, resulted in the following deductions: 1. That clay soils might be manured a considerable time before sowing without loss. 2. That light, shallow soils should not be manured heavily at one time; and the manure should be kept as near the surface as possible without leaving it uncovered. 3. That it is desirable to deepen the cultivated soil on all light land, as it thus gives it a greater power of retaining manure.

That all soils possess considerable power of absorbing and retaining manure, is well known; but the great question of the most economical application of different fertilizers is, and will long remain an open one, and one upon which every farmer can do more or less to satisfy himself by practical experiment. Let those who can, throw light upon the subject, for it is one of large importance in agriculture.

"Oats for Sheep"—Rearing Lambs.

A "Young Farmer" recently inquired whether "oats were injurious to ewes with lamb?" Perhaps the subject is worthy of some further notice.

It is a settled opinion with a large class of farmers, that ewes, to do well, should receive little or no grain during the winter, and they bring instances, as does the inquirer above named, in which grain (oats or corn, generally,) has been fed, which were followed by the loss of lambs at birth or when a few days old. But these instances if closely examined will disclose further facts something after the following order.

The flock were in rather indifferent order when they came to the yard in December, and from want of proper attention to their feeding and shelter, became still lower in flesh as the winter advances. At last the owner wakes up to the fact, and thinks he must do something to bring them on, or he shall lose all his lambs and perhaps a part of his old sheep. So, as late, perhaps, as the middle of February or first of March, he commences to give grain, and to "have it do some good," gives "a pint per day" or more; at any rate a larger quantity than the sheep can bear in their low condition. A sudden increase in flesh is the consequence, accompanied with derangement of the animal system—which results in difficult labors at lambing, fever and loss of milk in the ewe, and the death of the lamb from want of suitable nourishment.

Another class of farmers say that oats are not injurious to sheep, basing the declaration on their own experience. We have fed them to a considerable amount, and never raised better lambs—never had fewer losses than when oats were given each day for some months before lambing. As to corn, an Eastern farmer, who has kept sheep for twenty years, and has been in the habit of feeding corn for some weeks previous to lambing, says he never lost a lamb in consequence of his sheep having been in too high flesh. He has at the present time twenty ewes and thirty-one lambs—nine pairs, one triplet, and ten single—and has lost none from any cause.

If sheep are kept *in good condition at all times*, they are little liable to injury from feeding grain. On the contrary, they are much benefitted by the practice. We have found barley an excellent grain for sheep, and think farmers will find it profitable to grow the same for feeding out on the farm.

Sheep should be in good order, so as to yield a good flow of milk for their lambs. How can they supply two lambs (as is often necessary) without some extra feed? Roots are valuable as well as grain, and good early cut clover hay is a great help to thrift and comfort. The lambs also may be learned to eat, and if they come early, some provision of this sort should be made. The Eastern farmer above referred to, speaks on this point (in the *N. E. Farmer*) as follows:—

"I have practiced for a number of years messing my lambs, in a small enclosure adjoining the sheep-pen, with an opening large enough to let them through and keep out the sheep. They will generally begin to eat when they are two weeks old. For the past five or six weeks, my lambs (thirty-one in number) have taken from twelve to sixteen quarts of meal per day. I am not very particular as respects the kind of meal, though I rather prefer equal parts of corn and oil-meal. I have twin lambs at the present time, not far from two months old, which will weigh nearly sixty pounds. If in addition to the meal, they have plenty of good hay in a crib by themselves, they will require but little else. They will not be continually worrying the sheep, so that not only the lambs but the sheep will be in much better condition on turning to grass than they otherwise would. I have never discovered any injurious effects from giving my lambs so much meal, although I always let them eat all they will."

Improving Stock by Good Feeding.

MESSRS. EDITORS—I recently had occasion to visit an old gentleman who has been a farmer from his youth up, and who, on account of his soundness of judgment, is regarded in his neighborhood as quite an authority in matters of farm management. Among other subjects upon which we conversed, I found him especially enthusiastic, and withal sound and sensible, upon the improvement of stock. Some years ago a bull of the Short-Horn breed had been brought into his neighborhood, for the use of which $25, and then $20, and latterly $15, had been the usual charges. Like most other *new* things, this movement was at first regarded with a cautious coolness, or even a suspicion of attempted imposition, on the part of this conservative or man of slow progress. He had been engaged for many years in improving the native stock by rearing only the best calves, and doing this by the help of much more nutritious food than is usually given to calves intended for preservation; and he would often tell his neighbors who had had the use of this Short-Horn, that he would admit that they had spent their $20 wisely when they should be prepared to prove to him that their cows of the improved breed, half Short-Horn and half native, did really surpass some of his in dairy products. His desire not to be outdone by his "new-fangled" neighbors, led him, he said, to greater care and exertion than he had ever before made to make his calves and young creatures grow in the most thrifty manner possible, and he seemed very confident, (referring to cases by seeing which I might satisfy myself as to the correctness of his statements,) that stock which he had raised by special care, entirely of the native breed, was quite superior to *some* of the stock raised by *some* of his neighbors, though with one-half of the Durham blood in their veins. This superiority of his young stock, entirely native, to that of some of his neighbors, he was candid enough to admit as owing mainly to his own *extra* feeding and care-taking generally, and to the want of proper care and feeding on the part of those whose half-blood stock was inferior to his own. In cases where stock of the latter description had been *properly* fed and reared, the advantage of the Short-Horn cross was so evident, that our slow-moving friend was at length willing to admit it, and also to practice accordingly. He showed me a calf of this cross of nearly a year old, and so evident was its superiority to other calves of the same cross and about the same age in the neighborhood, as to convince me that *judicious rearing is about of as much importance in procuring first-rate animals as crossing with the very best breed in existence.*

The method of rearing calves which our friend has found so successful, consists mainly in feeding or suckling them *three* times a day, using nothing but new milk until they are eight weeks old—after which he gives skim-milk with flax-seed tea. Upon the withdrawal of the milk, besides abundance of grass, each calf is supplied with two pounds of oil-cake in the course of the day. He reckons that he is abundantly paid for all his *extra* labor in rearing calves in this way by their greater thriftiness, and especially by their immunity from disease. For twenty years he had not had a calf get sick or die, as they often do by common modes of rearing. A. B. A.

Notes and Inquiries.

THE PENN. STATE AG. SOCIETY, whose Prize List we have just received from one of its Vice-Presidents, AMOS E. KAPP, Esq., is to hold its next Fair at Pittsbugh, from Sept. 28 to Oct. 1.

ROCK-ISLAND CO. (ILL.) AG. SOCIETY.—This Society, whose Fair is to be held at Rock-Island, Sept. 8 and 9, has adopted the plan of paying most of its prizes in agricultural books and papers—among the latter a goodly number of the COUNTRY GENTLEMAN are included.

☞ We are indebted to SUEL FOSTER, Esq., Muscatine, for the Prize List of the Iowa State Ag. Society, whose Fair is to be held at Oskaloosa, Sept. 28 to Oct. 1.

BOUND VOLUMES OF THE CULTIVATOR.—D. S., *Ohio*, asks 1. What do the bound volumes of the "Cultivator" cost, including postage; and in what *style* are they bound? [One Dollar—bound in black cloth, containing 384 large and closely printed pages. Complete sets of the Third Series for 1853-'4,-'5-'6 and '7, are supplied for $5 by mail, or sent by Express for $3.75.] 2. Are the "Transactions of the State Agricultural Society," sent *gratis* to all applications; or, if not, what do they cost?" [They are generally printed merely for such members as according to each society's bye-laws are entitled to them; for public libraries, for distribution as premiums, for exchange between different societies, &c. They are therefore, seldom to be had by purchase, or in answer to ordinary applications, although extra copies are occasionally to be procured in this way.] 3. Can you give me the address of either or all of the following persons, viz: the Corresponding Sec. of the New York State Ag. Society; [Col. BENJ. P. JOHNSON, Albany, N. Y.,] ditto of the Massachusetts Board of Agriculture; [CHARLES L. FLINT, Esq., Boston, Mass.;] Kentucky Ag. Society; [R. W. SCOTT, Esq., Frankfort, Ky.]

SUGAR CANE MILL.—Several who have inquired for mills for crushing the Chinese Sugar Cane, are referred to the advertisement of EMERY BROTHERS, in this paper. We are told that there is a cheaper mill for this purpose, made at Worcester, Mass. If so, the manufacturers would promote their interest by advertising it.

☞ I like the COUNTRY GENTLEMAN immensely, especially the "Grazier," (which ought to be more voluminous,) as I believe in *stock*. Durham grades and Cotswolds are the stock for Canada. H. R. F.

☞ It is a maxim among an excellent class of farmers, "That a good farm, like a good joint of meat, only requires basting with its own dripping." Carry this out by using all the fertilizing materials which the farm will furnish, and there will be little need of going abroad for manures. It must be a system of mixed husbandry, however, and stock must be kept to aid in the manufacture of the "dressing" ever necessary in good farming.

INSECTS.—A bright fire of resinous pine, tar, shavings, or any other combustible, kindled in the garden at night, on a platform erected for that purpose, will attract and destroy millions of insects.

AGRICULTURAL PAPERS.—The commencement of a new volume of the COUNTRY GENTLEMAN, (July 1) reminds us of the duty of suggesting that paper to our readers as in every respect excellent. Two dollars a year are well invested in such a constant source of instruction and pleasure, in which everything is suggestive of intelligence and refinement. Albany: Luther Tucker & Son.—*Vermont Chronicle.*

Suffolk Hogs for Sale.

ONE Boar and two Sows, about two years old, bred by B. V. French, Esq., Braintree, Mass. Also one young sow about one year old, bred by John Giles, Esq., Woodstock, Conn. They will be sold low to close the concern. Apply to C. N. BEMENT,
July 22—w&m1t. Springside, Poughkeepsie.

Cider Mills.

THE subscriber being agent and Manufacturer of the justly celebrated **Krauser's Patent Cider Mill**, which has obtained such enviable notoriety wherever used, is prepared to furnish them for the coming season on most favorable terms, to agents and farmers. The machine has never been excelled, having always come off triumphant at the various State and County Fairs where it has been exhibited. Circulars containing cuts and descriptions of the mills, as well as all other implements of our manufacture, sent gratis on application. The public are cautioned against purchasing or using an inferior imitation of our mill, which is at present being manufactured in this city, as all mills which are so constructed as to force the apples up to the grating cylinder by means of a plunger or plungers, infringe on the patent of the Krauser machine, and the purchasers of such lay themselves open to a suit for infringement. The true Krauser Mill will have the name of the inventor marked upon them. None without this name have a right to be sold.

All orders for the above will receive our prompt and personal attention, and we feel assured we have it in our power to please the most fastidious. Liberal discounts for cash. Address HICH. H. PEASE,
July 23—w3tm1t. Albany, N. Y.

SUGAR CANE MILL.

THE above cut illustrates a new mill being manufactured in this city, by Messrs. EMERY BROTHERS of the Albany Agl. Works, and is so calculated as to be driven by their Two Horse Railway Power. It is a Three Roller Horizontal Mill, with counter shaft and geered motion. The Mill is strong and substantially made, and attached to a heavy and strong wood frame. It is capable of expressing from Sixty to One Hundred Gallons of juice per hour, depending upon how closely the rollers are adjusted and the maturity of the cane. The driest pressing of the cane renders the richest juice. The Mills will be ready in time for the coming cane harvest.

Price for Mill complete for Two Horse Power,--- $100.00
do Mill without wood frame, ---------- 85.00
(Weight about 500 lbs.)

For further information see the

ILLUMINATED CATALOGUE

Of the Albany Agl. Works, furnished gratis, on receipt of six cents to prepay postage on same, by the Proprietors.

EMERY BROTHERS,
July 29—w&m1t. 52 State Street, Albany, N. Y.

Thoughts on the Culture of Pears.

EDITORS CO. GENT.—Your correspondent R. R S., in your last vol. p. 350, closed an article on pear culture by saying: "this pear question is now open, and we hope to see it fairly and freely discussed." Suffer me to ask my fellow fruit culturist, will it not be well for us, after what has been written on this subject, to rest awhile, and collect the facts which more extended observations will give us, before we assume to know all that is to be known on this subject, or seek to establish laws from the few experiments we have made in this interesting department of horticulture?

We are too prone to rush to conclusions hastily drawn in our horticultural zeal, forgetting that in this, as in other departments of science, we must first establish our facts; and that it requires a goodly number of well-tried, closely-observed, as well as repeated experiments, to establish one horticultural fact.

When comparing my progress in knowledge from observations made in the garden and orchard during the past twelve years, with what has been written during this period, particularly on the pear and the strawberry, and noticing the change in my own views as well as that of others, the fact that we are all a. b. c. scholars in the science of horticulture, is too palpable to be denied. During this period the sexual character of the strawberry has been established, the recognition of which is the very foundation on which the successful culture of that fruit depends. In the cultivation of the pear, while collecting facts from which to deduce our laws, it should not be regarded strange that we have now and then presented for our consideration very conflicting testimony—experiments detailed that seem to have been carefully made, and yet leading to directly opposite results. This has been the case in every department of science till the accumulation of facts has warranted the establishment of a law that has at once dispelled confusion and reduced to order the chaotic mass. That the work now most pressing is the collection of facts—the gathering of one item of truth after another, we need barely announce.

Even on the subject of *pruning*, where are we to find embodied directions so clearly established as to constitute a safe guide as we enter the orchard? Even those of the lamented Downing—"to shorten a part of the last year's growth"—will assuredly lead to error of practice, for the concentration of the circulating fluids to repair an injury, as universally true in the vegetable as in the animal economy, will give such an increased predominance to the wood force, as to develop twenty wood *buds* where otherwise there would have been but one. So obvious is this fact that many of our best physiologists are ready to say the knife should not approach the tree at all.

What reliable teachings have we as to the character of the soil best adapted to the pear? How little stress is laid upon the condition of the subsoil, which has as controling an influence over the growth and the character of the fruit as the surface soil itself—hastening its period of ripening, as well as giving size and flavor to the fruit. Under-draining and subsoiling, in giving character to the cereals, is less marked in influence than a *dry* subsoil upon the character of our fruits.

On the climate best adapted to the pear, who has written so lucidly that we can know what atmospheric condition so favors the growth of the pear, both the *tree* and the *fruit*, as to make the crop as certain and reliable as the apple? Are the localities ever named, where under certain physical conditions of soil, or uncongenial climate, it will assuredly fail? The experience of our friend Mr. ALLEN, has taught us on this point at least one fact, that the climate of *Black Rock*, is so uncongenial, that further trials need not there be made. There the bleak winds from the lake, sweeping with almost tempest fury over exposed situations, give such an inclination eastward to the very trees themselves, that could they speak, you would hear them say, "*we would run* away if we could, but as we cannot, we must stop here, bearing no fruit, and die." Where is the chart delineating those localities, favorable or otherwise to its growth? Hence the importance of just such testimony as we have from Mr. Allen.

And moreover are we not yet learning that there are specific as well as general directions to be given on this subject; that what will succeed in one locality will fail entirely in another; that an Easter Beurre in Boston, regarded by their best judges a befitting *present* to the worthy editor of the Horticulturist, in Black Rock is no Easter Beurre at all; instead of being the most aromatic of pears, is only "as cold and watery, and no better as a winter fruit than a melon;" that the delicious Virgalieu of western New-York, is an outcast on the whole Atlantic coast. A curious fact has just been noticed by Mr. BUIST, touching the *Beurre Capiaumont*—that the character of the pear, as well as the vigor of the foliage of the tree, is influenced by the height of the tree and the distance of the fruit from the ground.

Who knows the best treatment to ripen the pear in perfection? Here too, are we not all still experimenters? Mr. HOVEY tells us to barrel them up as we do apples, and we shall surely find them all right in the spring, requiring no more care than apples, and that they can only be brought to their state of perfection by being ripened in masses. Another directs them kept in boxes—layer by layer, carefully placed and certainly separated by some absorbing substance, as paper, chaff, bran or leaves. While a third finds no better place for them than deposited on shelves in the cellar, so nicely adjusted that one shall by no means touch its fellow.

As certainly true is it that we are yet learning how to give them their golden color when at their period of ripeness—one, by a sweating process promoted by means of flannel, or at least woolen cloth—a treatment reminding one of the sheet of the hydropathist. Others still have other means of giving color and bloom to the pear; and just as diverse are the modes of training the tree, as to standard, half standard, or pyramidal form; and so opinionated are some culturists on this subject that in their eyes any deviation from a perfect pyramid, shows an "entire ignorance of the growing of the tree on the Quince stock."

We have alluded to this state of things, that we may say to horticulturists, be neither dismayed nor discouraged at what has lately been written on this subject. The age is one of conflict of opinion. In this array of alleged facts, seemingly diverse and incongruous as they are, some important lessons will be learned by us; one item of truth after another will be elicited, till we shall have gathered materials enough for a building. Let us all be encouraged to go on making our observations,

and cultivating as best we can, though our modes of culture be different, noting the effect of climate, atmospheric changes, character of soil and subsoil, different modes of pruning, and in different seasons,—various modes of ripening and coloring pears,—the comparative success on the pear and quince stock, as as well as the varieties best suited to each; and also memorandum the expense attending the culture of the dwarf and standard trees respectively, the amount and value of the crops of each, and make up your minds not to be discouraged if hard things are said, when your conclusions cross the track of other observers. Such is the fate of pioneers, as well as reformers. Bear patiently all disparaging remarks, for as surely as a calm succeeds a storm, will the day come when we shall settle down in that matured experience of the adaptedness of but a limited number of varieties to the quince, so that we shall be enabled to proclaim the suitableness of this or that variety to that stock, with the same confidence that we now have that the Dutchess d' Angouleme, Vicar, and Louise Bonne should only be grown on the quince, and that the Bartlett, Onondaga, Belle Lucrative, are adapted only to their native stock.

R. R. S. alludes to my orchard as being improperly managed. If so, my success affords the greater ground for encouragement, for when you shall have learned to do the thing just right, your reward will be proportionally augmented. My trees still stand erect, in vigorous growth, giving promise of life and good service in the cause. The crop of fruit has been improving in character and value, and doubling in quantity from year to year. The last year's crop of marketable pears, above what was consumed in the family and given to friends, amounted to one hundred and seventy bushels.

Of the pear, as a remunerating crop, I still prefer, as I have ever done, to say but little. Many have been misled by extravagant statements on this subject. The trumpeting of solitary instances of great success in cultivating; the enormous yield of some old tree occupying a favorable locality; the extravagant price that under fortuitous circumstances was realized from the crop, being made the basis of a calculation as to what would be the returns for an acre, misleads by producing impressions experience will rarely confirm.

Fruit growing to be profitable, must be made a business; and to carry it on successfully requires as intimate and thorough acquaintance in all its details, as mercantile or manufacturing business. It is not sufficient for one to know how to grow fruit; he must also acquaint himself with the demands of the market and direct his energies in the channel to meet those demands. Oftentimes will it devolve on the fruit culturist to create the facilities for getting his fruit opportunely into market to realize its value; and then, too, he must know how to get it up so as to give it the best possible character as it goes out into the world. While this is true of all fruit, it is especially so of the pear. There is probably no article of merchandize the marketable value of which so much depends upon the condition in which it goes into market, as that of fruit. In the last Report of the Mass. Hort. Society, we are told that Mr. Gordon of Brighton, obtained for his pears $10 per bushel, they being properly ripened—while those of a neighbor, equally good, at his side, sold but for three dollars. Equally important is it, that we know the value of labor, and how to direct it, that the cost of taking care of one's trees do not exceed the value of the crop.

The question is still a mooted one, whether the growing of pears can be made profitable at the present price of labor, unless much of the work can be done with a horse. To avail one's self of this, the tree must have some other than a pyramidal form. Horticulturists are urged on every side to go into the growing of fruits on an extended scale, stimulated by the promise of large profits; but not a word of caution is uttered as to the form of the tree adapted to the orchard with the view of abating the cost of its cultivation; and hence the *pyramid*, so beautiful, so appropriate to the garden, is transferred to the orchard. Mr. Hovey's beautiful rows of *Dwarf pyramids*, captivate the eye, but the annual expense of forking the ground—with the repeated hoeings to eradicate the weeds, is a shade in the picture that escapes observation. Nothing probably at the present crisis is more needed than some carefully conducted experiments as to the comparative cost of culture of the pyramidal and half standard form of tree. I. M. Ward. *Newark, N. J*

To Destroy Worms in Orchards.

Editors Co. Gent.—I see in your paper, a way to destroy worms' nests on fruit trees, such as common soap and whitewash. Now the best way that I ever saw, and the surest remedy without injury to the tree, is to take a gun and put in a good charge of powder, and put in a paper wad, and stand about eight feet from the tree. This will blow the nest entirely from the tree, and rid them at once without injuring the tree in the least. If any one doubts it, let him try it and he will be satisfied that I am right. R. Risley. *Hockanum, Ct.*

Foot Distemper in Cattle.

Messrs. Editors—Will you allow me to inquire of your readers for a cure for the foot distemper in cattle? There are two diseases quite unlike each other, one affecting the foot between the hoofs, which is generally cured by an application of caustic, or some such medicine. The other disease makes the animal lame, without any perceptible cause, for one or two days; then the foot and ankle begin to swell and become very much inflamed, and very painful, continuing in that way a long time. Will some of your medical readers prescribe a mode of treatment most likely to stop the disease, and prevent so much pain to the animal. Lewis Bailey. *Moray Farm.*

How to Dry Rhubarb.

Messrs. L Tucker & Son—In answer to your correspondent who inquires whether "you have had any experience in drying rhubarb for future use," please say to him that it is done by simply preparing it precisely as for pies, peeling the stalks and cutting in small pieces. Dry it in the sun or moderately warm oven. We think its flavor decidedly improved by drying. E. R. *Midd., Ct.*

Cement for Stopping Leaks.

A composition of four pounds of rosin, one pint of linseed oil, and one ounce of red lead, applied hot with a brush, will stop leaks in roofs, water casks, etc. So says a correspondent of the *Lynn* (Mass.) *News*, who has given it several years trial.

Inquiries and Answers.

INSECT COLLECTIONS.—R. D. of May Flower, inquires for "the most humane and speedy manner of killing butterflies and all kinds of delicate insects for preservation," and wishes an answer through the columns of "the best of Agricutural papers, viz., the Country Gentleman." Dr. FITCH says that as much of the *cyanid of potash* should be put into a small vial of water as will make a thoroughly saturated solution. This, if corked tight, will last for years. Butterflies, moths and other insects that would injure themselves by fluttering after they are caught, may be killed by simply pricking them in the thorax under the wing with the point of a needle wetted with this solution. Larger insects will require three or four punctures, but for the smaller ones one or two will be quite sufficient. Dr. F. uses the above, and considers it altogether the best means there is of accomplishing the object.

LIME —I wish to burn from 5,000 to 10,000 bushels of lime, to be applied to the soil. Any information as to the best mode of making and applying the lime would be gladly received. Should the lime be air-slacked before applied, and how much should be put per acre and the manner of applying, &c. How is lime measured,—by striking or heaping the half bushel, or is it weighed—if so, how many lbs. make a bushel? W. H. WETMORE. [As lime, after being applied for manure, must quickly become carbonate, and before it can exert any particular benefit on the crop, it may at once be slacked to powder, and thus fitted for even spreading. If slacked into lumps, it cannot be properly spread, and will consequently be of little value. It is usually allowed to slack in heaps in the field, which will do well if the water does not leave it in lumps. This may, however, be prevented by covering the heaps with straw or sods. It is sown broadcast when reduced to powder. A broadcast sowing machine will answer; or it may be done with a small scoop-shovel from the moving wagon which contains it. The quantity must vary with circumstances. If the lime is *magnesian*, thirty to fifty bushels is the largest quantity to be applied, and this to grass land the first year. Common lime may be applied at the rate of two or three hundred bushels per acre—but it is thought by many that half this amount would be equally efficacious. A rich soil, containing much vegetable matter, will receive more lime than a thin poor soil. There is mueh yet to learn in relation to its application. The *heaped-bushel* is used in measuring lime.]

BOOKS.—1. Will you please inform me where I can get a book, (if there is any,) that would be a guide for a young farmer, in the sowing and planting of crops. 2. Also, have you "Thomas' Farm Implements?" If so what is the price by mail. A BEGINER. *Ballston.* [Allen's "American Farm Book," (price $1,) is the best cheap work that we know of, on the subject. 2. Price $1. We can send you both]

BUGS IN PEAS.—If a "Subscriber" who asks for a remedy for bugs in peas, will pour just sufficient boiling water over the peas to cover them and no more, (for a larger quantity would destroy both peas and bugs,) and let them scald for one minute, his crop from that season's yield will be free from the bugs. I have tried it repeatedly, and found it effectual. The bug does not injure the germinating powers of the pea, but renders them unfit to use as food when dried, unless for animals. A JAMAICA PLAIN FARMER.

BEES.—Could you not publish a cheap monthly periodical on Bees, in which the natural history and culture of bees could be discussed? Perhaps QUINBY, LANGSTROTH, and others, will be willing to furnish you with matter. W. J. E. [It would, we imagine, be a difficult matter, to say nothing of the support it would receive, to fill a monthly sheet with valuable contributions on the management of bees. We shall be glad to publish all articles of interest, on the subject, which we may be favored with, in the pages of the Country Gentleman]

PROTECTION FROM DUST IN THRESHING.—If your correspondent, "A Subscriber," will procure a thin broad piece of sponge, large enough to cover the nose and mouth, (which can be procured of most of the druggists for a trifle,) *by slicing off from a large piece*, and fasten this on over the nose and mouth, having first moistened the same with water, which imparts a very soothing influence to the nostrils, and at the same time collects all the small particles of dust that would otherwise settle on the lungs by inhaling the dusty atmosphere. When this becomes filled with dirt and dust, all you have to do is just wash it out in water, and apply to the face as before. Try it; and should any one be benefitted by so doing, I shall feel fully compensated for penning this article, though the thermometer may stand at 100° in the shade while I am about it. P. B. CROWDER. *Amelia C. H., Va.*

Another correspondent says—My practice is to tie a piece of slightly moistened sponge of good quality over my mouth and nostrils. This does not at all interfere with breathing, and but slightly with conversation, and is a most perfect respirator. The sponge should have no large holes, and need not be thick. S. P. N.

CHLORIDE OF LIME.—Will you or some one who knows, inform me of the manner that chloride of lime acts upon the contents of privy vaults, in deodorizing or rendering them inodorous. Does it, by chemical action, fix all the obnoxious gasses, and if so, is it as readily available for plant food when applied to the soil in that state, as if no deodorizer had been used? If any one knows by actual experiment, I would like to be informed of the fact It is (or ought to be) a subject of much importance to farmers. What will Prof. S. W. JOHNSON say to it? J. M. YOUNG.

STRIPED BUG.—In respect to the striped bug on cucumbers, I find two or three onion setts in each hill a complete protection, although the bug is abundant. But a remedy for the villainous little cabbage flea beetle is sadly wanted. I tried flour of sulphur, but they took no notice thereof, scarcely taking the trouble to shake themselves clear of it. S. P. N.

WARTS.—Is there any way to remove effectually a wart from a horse's foot, directly under the fetlock?

MANURE FOR RUTA BAGAS.—I have one acre of light land, prepared for ruta bagas. I want five hundred bushels, and want rows not closer than two feet. I wish you would tell me what special manures to use to command success. My land will not bear more than two hundred pounds of guano, and this will not give me more than three hundred bushels. I have applied marl and ashes liberally, which greatly benefited my turnip crop last year. Will guano composted with plaster (100 lbs. guano 50 lbs. plaster,) deteriorate in

quality by keeping it in bags in a dry place for several weeks or months perhaps? T. L. M. *Surry Co., Va.* [We should think that now, after a full supply of guano, ashes and marl, that a good strong compost of stable manure and loam would be best, but this we infer our correspondent cannot command Bone manure may be useful—in some instances it has greatly increased the turnip crop—in others which we have known, it has produced no sensible result. The guano and plaster cannot injure, if kept perfectly dry.]

Currants and Raspberries.—Is the White Grape currant different from White Dutch? Is Red Grape generally known? I procured it from Cincinnati, and find it decidedly the best bearer of any I have; the fruit is twice as large as Red Dutch, and not so tart. White Dutch is best flavored of any I know. I have a number of small plants of Ohio Everbearing raspberry, that were planted late, and just now show signs of blooming. If I sow seeds from these, will they not produce the same variety? I cannot think they can "mix" with other sorts now, as the others have ripened their fruit and are not in bloom. The Ohio Everbearing is the only variety that has been thoroughly tested here and found satisfactory, being entirely hardy, and bearing large crops of tolerably fair berries throughout the summer and autumn, till checked by frost. We hope the Orange and Allen will succeed, but cannot yet speak positively in regard to them. E. Y. Teas. *Richmond, Ind.* [The White Grape currant is distinct from and larger than the White Dutch. The Red Grape has not been disseminated much. The seeds of any particular variety of the raspberry may produce plants precisely similar to the original, but the probability is in favor of more or less variation.]

Peach Brandy.—Please insert in the next number of your paper the best known recipe for making peach brandy. We have many millions of peaches, and but few know how to manufacture brandy from them. I am unable to obtain a recipe here, and would be much obliged if you would furnish me one. A Subscriber. *Atlanta, Geo.* [We have not been able to find any recipe for making Peach Brandy, but we give the following directions, which we find in one of our former vols., for making

Peach Wine.—Take nearly ripe fruit, stone it, and bruise the pulp in a mortar; put eight pounds of the pulp to one quart of water, and let it stand twenty-four hours, then squeeze out the juice, and to every gallon of it add two pounds of white sugar; then put it into a cask, and when it has fermented and become perfectly clear, bottle it up, and use at pleasure.

Birds and Cherries.—How can I save my cherries from the robbins and other birds which abound on my premises, without disturbance from the gun, notwithstanding their inveterate propensity to steal most of my smaller fruits. A. F. [We know of other remedy than the prompt use of powder and shot.]

Insect.—I enclose an insect which is destroying the apples around this vicinity, in great numbers. Will you please give us its name and history as near as you can. Wm. Proudman. *Amesbury, Mass.* [The insect enclosed belongs to the same family as the fire-fly or glow-worm. None of the insects of this group are regarded as injurious to vegetation. Is our correspondent certain that the insect he sent, is the one which does the injury to which he alludes?]

Masks for Threshers.—I see that a subscriber in your paper of 24th ult. inquires where he can get a mask or covering for the face, to be used when threshing with a machine. In my view the best remedy is to so build the machine that it will not throw the dust into the feeder's face, but discharge it through the machine with the straw. Then the feeder will not need a covering over the face any more than other persons working about the machine. Such machines are made at the Schenectady Agricultural Works. G. Westinghouse.

Draining.—I write to inquire of you where I can obtain a work giving thorough instruction on underdraining. I think I remember of seeing a notice somewhere in the back numbers of my Co. Gent., of your intention of preparing a small work in pamphlet form on that subject, for distribution among your subscribers. I. G. C. *Rockville, Ind.* [The work you refer to, noticed in Co. Gent., was a circular issued by Messrs. C. & W. McCammon, the extensive manufacturers of drain tile in this city, and we have requested them to send you a copy. We can send you postpaid, for 60 cents, a very good treatise on the subject—"Munn's Practical Land-Drainer."]

Grafting Peaches on Figs.—Will you inform one of your subscribers whether a graft of the peach-tree on the fig-tree, will bear fruit, and whether the fruit will be "*a peach without any stone.*" I have heard this assertion made by reliable persons, but I cannot believe it, and leave it to your experience to decide. A Subscriber. *St. James, La.* [The natural affinities of the fig and of the peach are as far separated as the peach and the willow. We have heard that if the peach is grafted on the willow, *when* it bears, the fruit will be without stones—and the same remark will apply as well to grafting it on the fig. So we might say with nearly equal propriety, that if the apple is grafted on a hitching post, *when* it bears, the fruit will have no cores and skins. The whole thing is impossible.]

The Buckthorn.—Will you or some of your correspondents please answer the following inquiries concern the buckthorn, in your valuable paper. 1st. The best age of plants for transplanting to the hedge row. 2d. Where best and cheapest obtained. 3d. At what price can from three to five thousand plants be furnished in the spring of 1859. E. Hawley. *Maitland Place, C. W.* [The buckthorn is perhpas the easiest and safest of removal of any hedge plant. Two years is the most suitable age. We think the plants are kept by A. Saul & Co., of Newburgh, and by W. Reed, Elizabethtown, N. J. The price is $10 per thousand.]

A Bad Weed.—Will you or some of your correspondents inform me through your columns, the *cheapest*, quickest and most effectual mode (other than grazing with sheep, none of which I have,) of eradicating the *wild onion* from a piece of rich bottom land? B. W. R, *of Virginia.* [If there is any way of ridding one's self of this most troublesome of weeds, there are multitudes who would be glad to know it, and we hope those who have tried any means of doing so which have proved either partly or wholly effective, will impart their experience for the benefit of others.]

Soda Water.—I should be greatly obliged, if you or some of your readers could inform me how to make soda water. A. B.

The Horse Fly.—Will some of your readers inform me how to protect horses from the bite of the horse and other flies. W. T.

Notes for the Month.

EXPERIMENTS IN POTATO CULTURE.—Mr. JOHN PEREUE of Montville, Ct., gives us the result of an experiment which he made last year, to test the comparative value of various commercial manures for potatoes. He planted five patches of 24 square feet—soil sandy loam, manured the previous year with stable manure—with Silver Lake potatoes, with the following result:

Lot.	Manure.	Product.
1.	None,	20 lbs.
2.	6 lbs. Bone dust,	23 lbs.
3.	6 lbs. Guano,	29 lbs.
4.	6 lbs. De Burg's Superphosphate,	37 lbs.
5.	6 lbs. Coe's Superphosphate,	49 lbs.

He adds—"Judging from the appearance of the vines before digging, I supposed that the guano would give the greatest yield. The vines were stouter and remained green after the other vines were dead. I always apply the superphosphate in the hill, at the rate of 350 lbs. to the acre. It will not pay me to use it on any other crop. I never lose by the rot one bushel to the 100 on my dryest soil; but in an adjoining field, where the soil is stronger, they rot in a wet season badly. I planted potatoes around some young pear trees, and mulched them; the result was, two-thirds rotted."

PRAIRIE FARMING.—A correspondent of the New-York Evening Post, writing from West Urbana, Illinois, gives rather a dismal account of the prospects of prairie farmers the present year. He says that during twenty-three days of May they had more or less rain, and that during ten of these days "it came down all the time with a copiousness creditable to tropical latitudes." After alluding to the very unfavorable seasons of 1844 and 1851, he says that his experience leads him to conclude that prairie farmers of Illinois may make up their minds to an order of events about as follows, recurring, say once in seven years:

1. One year great crops and high prices.
2. One year good crops and low prices.
3. One year drought and no surplus.
4. One year excessive rain and no surplus.
5. One year a general failure of crops.
6. One year corn will fail, wheat goood.
7. One year wheat fail, corn good.

☞ We learn that the Maryland State Fair is to be held at Baltimore, October 26, 27, 28 and 29, and trust that the generous efforts of the friends of the Society to reinstate it in the old condition of prosperity and success, may be rewarded by the fulfillment of all they can desire in its behalf.

☞ WILSON'S ALBANY has taken the lead over all other strawberries in this market the present year. They have proved much more productive than any other variety, the berries of a larger and more uniform size, and of a firmer flesh, thus rendering them less liable to injury by transportation to market.

STOCK SHOWS IN KENTUCKY.—We are having a number of stock fairs this spring that are very interesting; to give you an idea of what we exhibit at them, the the horse day at the fair in this (Lincoln) county, there were one hundred and fifteen entries, in but one class, and that, for general utility. There was some splendid mule stock shown—the yearling that took the premium was fifteen and a half hands high, and there was a pair of mules sixteen and a half hands high, three years old this spring. The premium horse mule colt was four feet four inches high, at two month old. There was a very nice show of cattle—Darhams of course. "Tom Moore," bred by Mr. Thorne, took a premium in his class. Noticing in a recent number of the Country Gentleman, (by reading which, for the past three or four years, I have been greatly benefitted,) that you would like to have the farmers let you know what is going on in their respective localities, I comply with the request. R. R. G. [We hope our correspondent's example will be imitated, and that he will himself repeat his favors. EDS.]

UNNECESSARY DESTRUCTION OF TIMBER.—We have no means of procuring the article on this subject, to which our correspondent S. ROBERTS, alludes, and if we had we could not make room for it at present. Mr. W. says—"Sewage and timber are subjects of vast importance to this country, and I think it would prove a service of very extensive benefit if they were more fully discussed in our agricultural periodicals."

BUCKS CO., (PA.) AG. SOCIETY.—We have received the premium list of this most efficient Society, whose Fair is to be held at Newtown, on the 29th September. A large portion of its prizes are to be paid in books and papers—among the latter about 200 copies of THE CULTIVATOR are offered.

☞ We have received the Premium List of the *Susquehanna Co. (Pa.) Ag. Society*, most of whose prizes we are pleased to see, are to be paid in agricultural books and papers—among them are several copies of our journals. The paper does not state when or where its Fair is to be held.

EGYPTIAN MILLET.—I enclose you a few seeds of the true Egyptian Millet; this grows abundantly on the borders of the Nile in Egypt, and is *not*, properly speaking, a rush. It belongs to the family of the *Juncus* rushes, and not to the *Sorghums*, to which the millets belong. It grows from 8 to 16 feet high, many stalks to one hill—grows generally in tenacious, moist lands, the borders of rivers. Moses was found by the daughter of Pharaoh among it, on the banks of the Nile. It makes a very good fodder for cattle and Egyptian buffaloes, and horses will eat it too occasionally. It agrees in all respects with the description of it given in your number of the Country Gentleman for 24th Jnne, 1858, page 401, so I refer to that, and confirm it. F. A. NAUTZ. P. S. Will you give notice that all parties wishing to correspond wish me, should address their letters to Philadelphia post office. This will be more convenient for me to get them quick than being sent to Winslow. F. A. N.

MANURING MEADOWS.—On this subject THAER, in his *Principles of Agriculture*, makes the remark that some farmers give more care to the cultivation of meadows than to that of arable land, saying: "When we manure our meadows plentifully, we are quite sure of a sufficient supply for our arable land." This is true in the long run, but at first sight it would seem poor policy. Grass will grow where grain crops do nothing without cultivation and manure.

AGE OF DUNG-HILL FOWLS.—A correspondent of the Louisville Journal states that he had a dung-hill fowl, which died on the 18th of April, that was hatched the first week in April 1841, and was consequently over 17 years old.

THE COUNTRY GENTLEMAN IN OTHER LATITUDES.—A South Carolina subscriber writes, in recently enclosing his subscription to begin July 1, that he discontinued his Co. GENT. at the end of last year, on account of its being published in a latitude so different. He had, however, found the numbers as preserved so interesting, that he concludes to renew, and now thinks it will be long before he again hazards the experiment of a discontinuance. A correspondent in Maryland says in a letter under date of the 7th: "The Country Gentleman is more and more interesting, and I make it a matter of conscience to recommend it wherever I go." Another from St. Mary's Co. in the same State, sends a club of five for the new volume

"with my best wishes for the success of a paper which I regard one of the best (of any kind) ever printed."

We should acknowledge clubs for the new volume from Academia, Pa., Beloit and Milwaukee, Wisconsin, and smaller ones from several other places. It will be well to repeat our prices for the benefit of others:—

One copy one year strictly in advance,	$2.00
One copy one year NOT IN ADVANCE,	2.50
Three copies one year, or Six copies six months,	5.00
Ten copies one year,	15.00

One may pay for his own paper one year, by sending us *four subscribers* and $8, when we will credit him on account for his own subscription. It would be a simple way for some of our friends who are in arrears to bring up the balance due in this way; we trust the hint will not be lost.

OUR STATE SHOW AT SYRACUSE. — Prospects now seem favorable for a large attendance. A larger proportion than usual of the judges appointed at the May and June meetings, have signified that they will be on hand. The position of the buildings has been determined upon, although but a small beginning has yet been made by the local committee in securing their erection. They will doubtless work the faster when once started, and we have no doubt that all other sections of the state will come nobly forward to assist Central New-York in making an exhibition worthy of the Society and of our farmers

THE BEST FARMS—A STEAM PLOW.—No less than *eleven farms* have been entered for competition for the premiums offered this year by our State Ag. Society—seven of them Dairy Farms in Lewis county. Such a waking up among our agriculturists is more unusual than it should be. An application has also been made for the $250 premium offered for a machine that will plow satisfactorily by steam power. The inventor, we believe is a Trojan, and the trial was set down for Monday, the 19th inst., at that city. After it has been held our readers shall hear more of the matter.

FIRE BLIGHT—SUGGESTION.—E. D. Pierson of Union Springs, N. Y., informs us that he has been successful in arresting the fire blight in the pear tree, by the following treatment: He shaves off all the diseased bark, to a foot below the affected portion, leaving a thin layer where the bark is not destroyed. This arrests the disease, and the thin bark afterwards forms a new covering. As the descent of the sap is only through the bark, it is regarded as needless to cut away any of the *wood* to check the blight. This mode of treatment may be worthy of further trial.

SOMETHING NEW.—E. D. HALLOCK is an old Albanian. Mr. H. has for some years been engaged in an Agricultural Warehouse and Seedstore at Rochester in this State. He has built up a business which now commands wide custom through Western New-York, and in which, knowing well the strict and thorough-going honesty with which it is conducted, we desire to commend him to the reader—taking the opportunity to do so, in noticing one or two recent inventions we last week examined at his store. One of them was a broadcast sowing machine, which costs only $7, and will sow a *breadth of over thirty feet* with any kind of seed, from peas to clover or timothy,

"doing the work as well, if not better than the most experienced sower could by hand, besides performing three times the amount of work in the same time. Its construction is simple, being merely a sack, with a hopper at the bottom, under which is a revolving cylinder, turned by means of a crank, with arms or tubes through which the grain passes, it being thrown out by centrifugal force. The width of space sown depends upon the specific gravity of grain. The quantity is regulated by a slide, and can be changed in a moment. The machine is made of heavy tin, and can be repaired by any mechanic in that branch of business."

We also saw a new Dynamometer, which if it be found to succeed as well in practice as it now promises, will surpass any instrument of the kind with which we are acquainted at home or abroad. We will endeavor hereafter to give a description.

"THE NATIONAL HORSE SHOW BULLETIN." — We have recived No. 2—dating of course, from Springfield, Mass. The managers of the coming exhibition do not mean to hide their light under a bushel. It is unquestionably the true way, if such a show is to be held, to acquaint all the world with the fact, and secure the widest possible competition and the largest attendance This our friends intend to do. Some of the first citizens of Springfield constitute the board, with George Bliss, the well known President of the Michigan Southern Railroad, at its head. Those who desire full particulars as to the Exhibition, can secure them by addressing George Dwight, Chief Marshal, or J. N. Bagg, Secretary, Springfield, Mass.

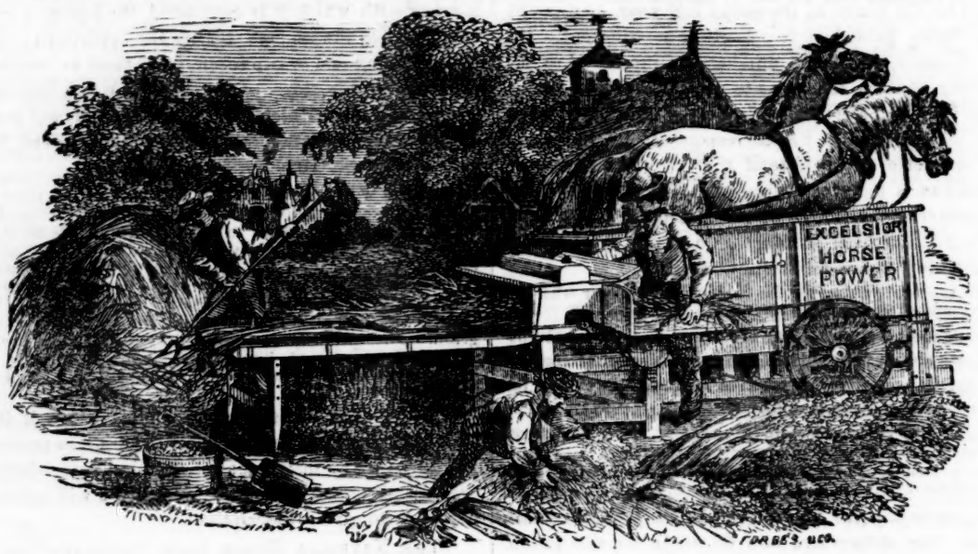
THE GREAT ST. LOUIS FAIR.—We have received the schedule of Premiums for the 3rd annual Fair of the St. Louis Agricultural and Mechanical Association, to commence on Monday Sept. 6, and continue six days. The Prize List is the most extensive, and the rules and regulations for the general management, the most complete of any we have ever seen issued in this country. Indeed the whole preparations are in the most magnificent style. Among the buildings on the showgrounds, which are shaded with a beautiful grove of forest trees, are an amphitheatre of sufficient size to seat 12,000 persons, and to shelter 36,000—spacious Floral, Mechanical and Fine Art Halls—a Gallinarium, 30 feet in diameter, three stories high, built entirely of wire, with ninety apartments, and all the conveniences necessary for the exhibition and keeping of poultry, &c., &c.

FOREST TREES.—Richard S. Fay of Lynn, Mass., has growing on his farm many thousands of the Scotch larch, English oak, and other trees of his own importation and planting. Some of the larches are thirty feet high. Mr. Fay concludes if the growth goes on unimpeded for 30 years, the timber will be worth $300 an acre. Here is a hint for farmers.

FRUITFUL BENEVOLENCE.—"That the poor might have apples as well as the rich," General PUTNAM, the large-hearted hero of Ticonderoga, planted apple-trees for a mile along the highway of his native town.

RICHD. H. PEASE'S

EXCELSIOR AGRICULTURAL WORKS.



The Excelsior Changeable Railway Horse Power,

With Threshers, Separators, Cleaners, Clover Hullers, and

CIRCULAR AND CROSS-CUT SAW MILLS, FOR VARIOUS PURPOSES,

CIDER MILLS, AND ALL OTHER IMPLEMENTS ADAPTED TO THE POWER.

WE have no hesitation in recommending our Horse Power as the very best Machine of the description ever offered to the public. Its simplicity of construction and accessibility to all parts of its machinery, all the gears being on the outside of the frame, is in itself an item which should claim the attention of every farmer. The various improvements which we have made over other machines of the same class, though they may appear small in detail, yet as a whole they have given our Power a superiority over them which has been abundantly attested in the various trials with competing machines. Below is the report of the Louisville Journal in reference to the trial of Horse Powers and Threshers, on the Grounds of the United States Agricultural Society, held at Louisville, in September, 1857 :

"At the trial before the Committee, of Endless Chain Horse Powers and Threshing Machines, the Excelsior Machine, manufactured by Richard H. Pease, of Albany, N. Y., came off successfully—they having threshed the fifty sheaves allotted them in five minutes and eight seconds, while the Emery competing Machine occupied six minutes in threshing the same amount or nearly twenty per cent. longer than the Excelsior. The threshing was done by the mere weight of the horses, no harness being used. The workmanship on the Excelsior Thresher is of a very superior description. Every farmer should have one of these Machines, as it is adapted to threshing and grinding grain, cutting fodder, sawing wood, pumping, churning, &c. It is truly a useful and cheap Machine."

At this Fair we were awarded the First Premium, the Society's Large Silver Medal, for the best Horse Power and Thresher, and a Diploma of Special commendation for the best MOTIVE POWER FOR GENERAL FARM USE Under this head we came into competition not only wtth all Horse Powers, but Steam Engines, Wind Mills, &c. This is the highest commendation that has ever been awarded to similar machines, and indeed it was a great triumph, as the most celebrated Machines in the country came in direct competition with our own in a fair and impartial trial. We have also taken premiums at nearly every State and County Fair where we have exhibited, and where the Machines have been put in operation before competent committees.

Our Horse Powers are especially adapted to driving Threshing Machines, Circular and Cross Cut Saws, Machine Shops, Elevators, Pile Drivers, Ferry Boats, Hay Cutters, Cider Mills, Feed Mills, Corn Shellers, and may be used for Loading and Discharging Vessels, and indeed for any purpose where only One or Two Horse Power is required. The angle of elevation necessary to operate this Power, depends on the weight of the horse and amount of work required to be done. The operator of the Machine should always be his own judge in this matter. However, we will state that our Machines are so geared that the elevation necessary is less than other Machines, when the same amount of power is applied.

Thresher and Separator.

We would call the attention of Farmers and others desiring to obtain the most perfect Machine extant, to the ease with which the concave can be raised and lowered to suit the various kinds and conditions of grain, no wrenches being required. All that is necessary to adjust it, is to unscrew two thumb screws, one on either side of the Machine, then adjust the concave as desired, turn the screws again, and it is fixed, it being the work of only a few seconds ; also, to the nicety of the balance of our cylinders, in order to secure their running with the least friction ; and to the general getting up of the Machine, as we are very particular to use nothing but the best seasoned timber, and we have never yet met with an accident from the using of bad wood, although we have made thousands of machines.

CAPACITY.—The Single Power and Thresher will thresh from 100 to 175 bushels of Wheat, Rye, Barley, or Buckwheat, or from 175 to 200 bushels of oats in a day. The Double Power and Thresher will thresh from 200 to 250 bushels of Wheat, &c., and from 350 to 375 bushels of Oats, in he same time, attended by one extra man. The construction of the Power is such that it can be changed from a right to a left hand Machine, and the reverse, at pleasure, as the gears are all outside the Power, and accessible at all times.

WARRANTY.—If the Powers and Threshers do not answer the description, and fail to do any reasonable amount of work required of them, after a fair trial, following the directions sent with each Machine, the money will be refunded, and the Machine returned at the manufacturer's expense.

We here beg to call the attention to a few certificates from farmers in various sections of the country ; had we sufficient space, we might add many more.

CERTIFICATES.

KINDERHOOK, Dec. 21, 1857.

Mr. RICH'D H. PEASE, Albany, N. Y.—Dear Sir—The Two Horse Power, Thresher and Separator, I purchased of you, is certainly the best Machine I have ever seen. Having given perfect satisfaction in every way, I would

recommend all farmers who use a Threshing Machine, to buy one yours in preference to all others.

JOHN H. CORNING.

LINCOLN Co., TENN., Sept. 26, 1857.

Mr. RICH'D H. PEASE, Albany, N. Y.—Dear Sir—Having purchased one of your Excelsior Horse Powers of your agent, Mr. Shoffner, I think it is undoubtedly the most perfect Machine that I have ever met with. I have threshed fifty bushels of wheat in one hour, without sweating my horses in the least, and would recommend it to the use of every farmer. WM. DYER.

NICHOLASVILLE, KY., Sept. 1, 1857.

Mr. RICH'D H. PEASE, Albany, N. Y.—Sir—I have been using one of your Excelsior Horse Powers and Threshers for two years. I have this season threshed forty-three hundred and ninety bushels in twenty days, notwithstanding foul weather and the moving of Machine.

I have threshed as much as three hundred and twelve bushels in one day. The straw was cradled, and very long, it being unusually so this season. J. M. ROBERTS.

BETHLEHEM, ALBANY Co., N. Y., Aug. 1, 1857.

Mr. RICH'D H. PEASE—Dear Sir—The Two Horse Power and Thresher I bought of you, is certainly the most superior Machine of the kind I ever saw work I think I can thresh more grain, and do it easier, than with any Machine I ever worked with, and I have followed the business for a number of years. Several of my neighbors say they will get their Machines of you for the next harvest.

Yours respectfully, WM. WANDS.

BEDFORD Co., TENN., Oct. 15, 1856.

We, the undersigned, hereby certify that we have purchased of the Agent of the Manufacturer, Rich'd H. Pease, of Albany, New York, his "Excelsior Horse Power and Thresher," and having used them a sufficient length of time to convince us of their utility and durability, feel no hesitancy in saying that in our opinion they are the very best of which we have any knowledge, they having performed to our entire satisfaction. Given under our hands, day and date above.

Garret Phillips,	Benjamin Garret,
M. L. Dismukes,	Alex. Sanders,
Thos. Lipscomb,	Wm. M. Goggin,
Wm. A. Allen,	Alex. Eakin,
J. T. Arnold,	Redding George,
W. W. Hastings,	J. J. Koonce,
James Mullins,	W. C. J. Brown.
H. D. Davidson,	

EAST GREENWICH, N. Y., Feb. 25, 1857.

Mr. RICH'D H. PEASE—I received the Two Horse Power, Thresher and Separator, I purchased of you, and put it to work to test it. I have threshed 2,500 bushels of wheat, oats and rye, with them, without a break of any kind. It works to my entire satisfaction, and I think there is no better Machine made. WM. MCNEIL.

All orders for any of the above machinery will receive our prompt and personal attention, and we feel assured we have it in our power to please the most fastidious. Liberal discounts for cash. Address.

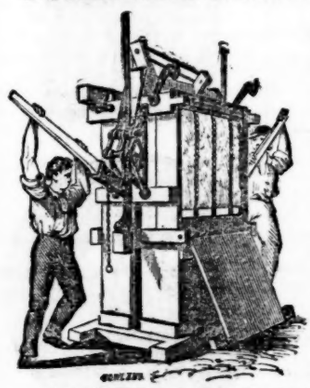
July 29—w3tm1t RICH. H. PEASE, Albany, N. Y.

FOR SALE,

A VERY valuable BREEDING MARE, of the imported "Trustee" and "Black Hawk" stock of horses. Breeders of fine horses are requested to look at her, at the farm of ORIN BENEDICT, in Pittsfield, Mass.

June 3—w1tm2t*

INGERSOLL'S
Premium Portable Hay Press.



THIS PRESS combines greater power and portability, requires less labor, occupies less space, and costs less money, than any other machine for baling hay ever offered to the public.

It is equally convenient for pressing cotton, hemp, hops, broom corn, rags, husks, &c. Samples may be seen at our warehouse, and circulars, with cuts and full descriptions, will be furnished upon application, by letter or otherwise, to

FAIRBANKS & CO., Scale Manufacturers,
June 17—w8tm2t No. 189 Broadway, New-York.

United States Agricultu'l Society.
REPORT ON HORSE POWERS.

THE manufacturer of an infringing Horse Power, who originally (*about three years since*), made patterns from Emery's Power of all the working parts, and made every effort to imitate in appearance, even to the color as well as the name, &c., did not, until suits at law for infringments were instituted in the "*United States Court*," change the name to "EXCELSIOR." He also very materially changed some of the most important and valuable features of the working parts, and its changability much to its detriment, as his experience in the business has already demonstrated to him and those purchasing and dealing in his machines.

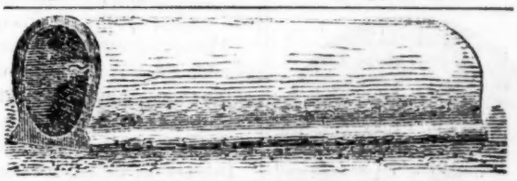
The same manufacturer continues making a few machines, and in his advertising, uses a "Newspaper Puff" copied from, if not dictated for the Louisville Journal of 1857, a report of a trial of machines by the United States Agricultural Society, in which it claims awards and merits, &c, &c., which are untrue, &c; to set the matter right, the report is here annexed verbatim.

"DOUBLE RAIL WAY HORSE POWERS—*Richard H. "Pease, Albany, N. Y., Special Diploma of Commendation "—Emery Brothers, Albany, N. Y., Diploma of Commen- "dation. After the most careful examination the committee "were with difficulty able to discover that either of the above "machines possessed any advantage over the other.*"

So far from being awarded by the Committee as in competition with Steam Engines, it is only necessary to say, each Engine was reported on separately and received the same Diploma, with the exception that FIFTY DOLLARS of plate was also awarded to one of them—no medals, gold or silver, great or small, having been awarded. It is important to state the Excelsior Power in that trial cost at least twenty dollars more than those offered for sale, as can be shown by the workmen who made it; also that machines now bearing that name, have been since altered, and much to their detriment, since that trial.

The public can distinguish for themselves the difference in the Powers, by obtaining a copy of the New "Illuminated Catalogue," furnished gratis on receipt of six cents to pay postage on same, on application to

EMERY BROTHERS,
Proprietors Albany Agl. Works,
Aug. 1—w&m1t. Albany, N. Y.



ALBANY TILE WORKS,

Corner of Clinton Avenue & Knox St., Albany, N. Y.

THE subscribers, being the most extensive manufacturers of Draining Tile in the United States, have on hand, in large or small quantities for Land Draining, the following descriptions, warranted superior to any made in this country, hard burned, and over one foot in length. On orders for 5,000 or more, a discount will be made.

HORSE-SHOE TILE—PIECES.					SOLE TILE—PIECES.				
2½ inches rise,	--	$12 per 1000.			2 inches rise,	--	$12 per 1000.		
3½ "	"	--	15	"	3 "	"	--	18	"
4½ "	"	--	18	"	4 "	"	--	40	"
5½ "	"	--	40	"	5 "	"	--	60	"
6½ "	"	--	60	"	6 "	"	--	80	"
7½ "	"	--	75	"	8 "	"	--	125	"

Orders respectfully solicited. Cartage free.

C. & W. M'CAMMON,
Albany, N. Y.
PEASE & EGGLESTON, Agents,
Excelsior Ag. Works, Warehouse and Seed Store,
Mar. 1—w&m8m. 84 State-st., Albany, N. Y

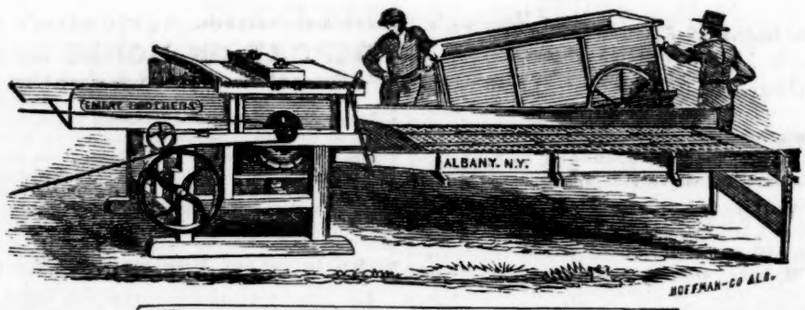
Devonshire Calves for Sale.

TWO Devon Bull Calves, one dropped May 17th, the other June 5th. Also four Heifer Calves, dropped April 3d, 5th, 7th and 12th, all got by Devon bull "Kwasind," bred by C. S. Wainwright, Esq., of Rhinebeck, Dutchess county, N. Y. All full bred, and good specimens of the breed. A rare chance for farmers to improve their stock at a low figure, if applied for soon. Inquire of C. N. BEMENT,

July 22—w&m1t. Springside, Poughkeepsie.

Horticultural Books,

Of all kinds, for sale at the Office of the Co. Gentleman.



EMERY BROTHERS,

PROPRIETORS OF THE

Albany Agricultural Works,

52 STATE STREET, ALBANY, N. Y.

PATENTEES AND MANUFACTURERS OF

EMERY'S

PATENT CHANGEABLE RAILROAD

HORSE POWER,

ALSO OF THRESHING AND OTHER MACHINES,

AND DEALERS IN

Agricult'l Implements and Seeds.

THESE Horse Powers having gained a world-wide reputation and introduction, and standing as they do at the head of the list for utility and workmanship, Farmers and Dealers desiring such machines hazard nothing in purchasing them or any other machines from the Proprietors of the above manufactory. Their prices and terms are more liberal than those of any other manufacturer in the country, for similar machines and workmanship.

Dealers furnished on demand with any amount of machines at all times, and on the most favorable terms consistent with a reasonable margin for profit to the manufacturers.

The manufacturers of these machines have received more First Premiums for them, from National, State, and County Ag. Societies, during the past ten years, than any other *ten manufacturers of similar machines* in this country.

For full descriptions, illustrations, prices, terms, capacity, warranty, transportation, &c., &c., see the newly published

ILLUMINATED CATALOGUE

of the Proprietors, which is furnished gratis, on receipt of six cents to prepay postage on same.

SALUBRITY IS HEALTH!

GOOD MANURE IS FARMER'S WEALTH!

DR. COUTARET,

The great European Disinfector and Promoter of Public Salubrity,

Original Inventor of the Celebrated Disinfecting Processes, and of the best method of making Concentrated Animal Manure.

(Patented United States, January 8th, 1856.)

ABATEMENT OF ALL NUISANCES arising from Putrid or Decomposing Organic Matter.

No more Offensive Effluvia!

Instantaneous and permanent disinfection of all places and matter, deemed detrimental to the public health, by

COUTARET & BOMMER'S DISINFECTING AND MANUFACTURING COMPANY

which business consists of:—

1st. The inodorous emptying of privies or cesspools, by means of previous disinfection.

2d. The permanent deodorization of privies, sinks, cesspools, and other receptacles of the like. Also, of slaughter-houses, bone-boiling establishments, carcasses of dead animals, animal black, glue, soap and other factories; sewers, street mud and street gutters, stagnant corrupted water; infected vessels, hospitals; in one word, of all places and substances needing disinfection. This work, to be performed *gradually* at any time emanations become offensive, so that no disagreeable odor may arise during the whole year.

The merits of these processes having been fairly demonstrated to the city authorities of New-York by practical experiments; approved and adopted by them, as being the only genuine, which, in every respect, can be profitably applied; they are now in practical use by said company, in the cities of New-York, Brooklyn, Williamsburg, Hoboken, Hudson, Jersey City, &c.

N. B. A model manure factory is in course of erection, for the purpose of converting such materials which are rich in nourishing principles, into concentrated manure of the best quality.

TO ANY PARTY ABROAD,

We propose:—

1st. To erect in any locality a disinfecting establishment, and to connect it with a manure factory, for the purpose of manufacturing their concentrated manure from disinfected privy soil, offal of slaughter houses, carcasses of dead animals,—in one word, from all substances naturally rich in nourishing principles; and to communicate the best and most approved processes, to obtain a rich manure in an economical way. (In the factories organized upon our plan, no smell will arise from the manure materials therein, and as said factories can be constantly kept inodorous, they can be established anywhere.)

2d. To improve the 'modus operandi" of already established factories of poudrette, superphosphate of lime, animal black, glue and other products, which preparation requires the knowledge of practical chemistry, and render such establishments permanently inodorous. Also to initiate offal contractors into the best mode of obtaining the greatest profit from dead animals.

3d. To demonstrate the merits of said processes to any official person or committee, or to any private party desirous of taking hold of this enterprise, by making before them an experiment on the contents of a privy; and also on any other infected matter or place they may select for this purpose.

4th. To assign and transfer to any party, the patent right to use said processes in their respective localities, county or State, on reasonable terms.

This subject opens a useful and profitable new branch of industry to enterprising men, and particularly to farmers:—

1st. For populous cities or towns, a joint stock company or a partnership may be formed, for the purpose of carrying on at once, the disinfecting and inodorous emptying of sinks; and also the collection of dead animals and the offal of slaughter-houses; and connecting this with a manure factory, for converting the sink soil into "Poudrette," and the offal and dead animals partly into concentrated manure, and partly for chemical purposes.

2d. For smaller towns or localities, privies may be disinfected by any intelligent man, and their contents reduced into "Poudrette," for sale, or by any farmer or gardener living in the vicinity, in view to use this disinfected matter on his farm or garden. These disinfectants being composed of the most powerful agents of vegetation, it merely requires to mix them with the contents of privies, to have a ready-made concentrated manure of the best kind, which may be applied either in its liquid state, if immediate use is required, or to be dried and reduced into powder for using it or selling it ultimately.

Applications directed to the above company at their office, **No. 333 Broadway, New-York City,** will be promptly attended to.

Pamphlets giving full information on the subject, may be had at the above office, or sent by mail to any one desirous to secure for himself this new business.

Inquiries in relation to the merits of these processes, may be made of the City Inspector of New-York, under whose control our business is carried on.

July 8—weow5tm1t.

Nurserymen, Florists, and Agriculturists.

PAUL BOSSANGE, agent for LOUIS LEROY of the GRAND JARDIN, Angers, France, begs to announce that he is now fully prepared to execute all orders for Fruit, Forest, and Ornamental Trees, Shrubs, Flowers, &c.

Catalogues of the prices current, embracing shipping and insurance charges, and all other needful information, may be had gratis on application to

PAUL BOSSANGE,

May 20—w1am4t 20 Beekman street, New-York.

GOOD MEDICINES.

IT IS estimated the AYER'S CHERRY PECTORAL and CATHARTIC PILLS have done more to promote the public health than any other one cause. There can be no question that the Cherry Pectoral has by its thousands on thousands cures of Colds, Coughs, Asthma, Croup, Influenza, Bronchitis, &c., very much reduced the proportion of deaths from consumptive diseases in this country. The Pills are as good as the Pectoral and will cure more complaints.

Everybody needs more or less purging. Purge the blood from its impurities. Purge the bowels, liver and the whole visceral system from obstructions. Purge out the diseases which fasten on the body, to work its decay. But for disease we should die only of old age. Take antidotes early and thrust it from the system, before it is yet too strong to yield.

Ayer's Pills do thrust out disease, not only while it is weak but when it has taken a strong hold. Read the astounding statements of those who have been cured by them from dreadful Scrofula, Dropsy, Ulcers, Skin Diseases, Rheumatism, Neuralgia, Dyspepsia, Internal pains, Billious Complaints, Heart-burn, Headache, Gout, and many less dangerous but still threatening ailments, such as Pimples on the face, Worms, Nervous Irritability, Loss of Appetite, Irregularities, Dizziness in the Head, Colds, Fevers, Dysentery, and indeed every variety of complaints for which a Purgative remedy is required.

These are no random statements, but are authenticated by your own neighbors and your own Physicians.

Try them once, and you never will be without them.

Price 25 cents per Box—5 boxes for $1.00.

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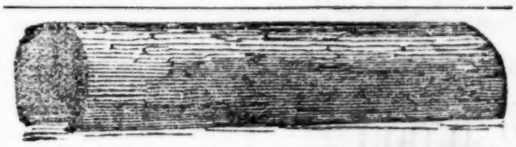

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April 8—w2m—eow2m—w2m—m6t.

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